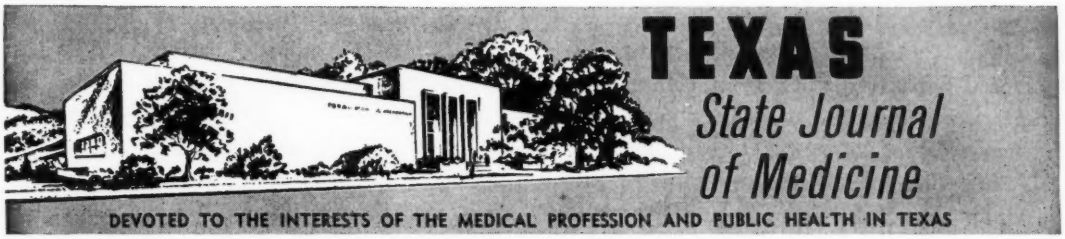

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Dr. Franklin W. Yeager

Dr. Franklin William Yeager, Corpus Christi, became the ninety-fourth President of the Texas Medical Association in April—one of the youngest men ever to hold that office and the son of a former vice-president of the Association.

He succeeds Dr. Howard O. Smith of Marlin.

Born in Corpus Christi on May 16, 1914, Dr. Yeager is the son of Dr. Charles Philip and Almeda (Scott) Yeager. He was graduated from Corpus Christi High School in 1931 and received his bachelor of science degree in chemistry from Southwestern University in Georgetown in 1935.

Dr. Yeager was awarded his medical degree in 1942 from Baylor University College of Medicine, Dallas, where he was a member of Phi Rho Sigma medical fraternity. He interned at Robert B. Green Hospital in San Antonio the following year.

The physician entered the United States Army Air Force in August, 1943, and was stationed at Keesler Field, Miss.; Miami Beach, Fla.; Scott Field, Ill.; and Greensboro, N. C. Graduated from the AAF School of Aviation Medicine in May, 1944, he went overseas in February, 1945, to serve as a flight surgeon with the 814th Troop Carrier Squadron and with the Air Transport Command in England, France, Italy, and the Azores. A captain, he was chiefly involved in evacuating American sick and wounded from Europe to the United States.

Dr. Yeager returned to Corpus Christi in 1946 to begin general practice in partnership with his father, a past vice-president of the Texas Medical Association and former councilor of District 6. In 1949, he did postgraduate study in

surgery at Cook County Postgraduate School, Chicago.

A past chief of staff at Ghormley, Sizer, and Memorial Hospitals in Corpus Christi, Dr. Yeager has also served as chief of surgery at the first two and as secretary of the medical staff at Spohn Hospital. He was a member of the committee which established the first blood bank in Nueces County and a member of the committee which established the outpatient department for the medically indigent at Memorial Hospital.

The presidency of the Texas Medical Association comes to Dr. Yeager after many other professional honors, including the chairmanship of its Board of Councilors. He is vice-chairman of the Texas State Board of Health, to which he was appointed in 1953 by former Governor Allan Shivers. He has been president of the Fifth and Sixth Districts Medical Society; president of the Nueces County Medical Society; councilor of District 6 from 1952 to 1958, when he became President-Elect of the Texas Medical Association; and is the vice-councilor of the Southern Medical Association. He is a member of the American Medical Association. In 1942, Dr. Yeager was co-author of an article, "Rapid Treatment of Syphilis," in the *Tri-State Medical Journal.*

Despite a busy medical career, Dr. Yeager finds time to participate in community activities. He is a director of station KZTV, Corpus Christi. He was president of the Corpus Christi Rotary Club in 1952 and governor of Rotary District 185 in 1955. Now a member of the First Methodist Church in Corpus Christi, he is a former member of the board of stewards of Oak Park Methodist Church there. In addition, he is a member of the Corpus Christi Country Club and YMCA, and has worked with such groups as the United Fund and Boy Scouts of America. He has been a director of the Corpus Christi Chamber of Commerce. His hobbies are golf and fishing.

Dr. Yeager's family consists of his wife, the former Miss Yvonne Price of Tucson, Ariz., and four daughters. Patsy, 21, is a junior at Texas College of Arts and Industries in Kingsville, while the others, Charlene, 15, Jonell, 13, and Rhonda, 4, still headquarter at the Yeager home, 5301 Ocean Drive, in Corpus Christi. Dr. Yeager has one sister, Mrs. E. A. Blackburn of Houston.

Dr. Yeager has earned a reputation for tenacity and determination. He is known for his willingness to take a positive and forthright stand on issues of importance, and to pursue this stand to an uncompromising conclusion. This characteristic undoubtedly will be evident in his leadership of the medical profession this year.

A Blemish on Medicine's Golden Age

That we are living in the Golden Age of Medicine cannot be denied. Although we are well past the threshold, there appears unequivocal evidence that the sheen of the times is dulling. Rather ironically, the object responsible for shading the brilliance of the era, namely Staphylococcus aureus, bears the implication "golden" from the Latin word *aurum* meaning *gold.* However, the festering agent responsible for blighting the antibiotic age is golden in name only. It is undebatable that in Staph. aureus medical progress has encountered a formidable foe that threatens many of the gains of the last 20 years.

Revealing reports covering all continents disclosed that all branches of medicine are concerned with the problem of antibiotic resistant staphylococci. In fact, seldom has medicine been confronted with a problem having such worldwide distribution as that created by this particular bacterial organism. The seriousness of the situation, which has become a threat to life, was recognized early at the University of Texas Medical Branch Hospitals. The fact that the staphylococcus hazard would be a continuing hazard was also recognized early.

How had we come into these troubled times? As each new antibiotic offered significant advances in therapy over the preceding one, all doubt was dispelled that we were in a new era. Gradually and unconsciously, the reliance for the control of infection was shifted to antimicrobial agents. Therapeutic perfection seemed to be with us, and the medical world easily was lulled into an attitude of self-satisfied and almost indifferent complacency toward infectious disease. Because of the fantastic accomplishments in management of infections, there occurred an insidious decay in the structure of accepted procedures of infectious disease control in hospital, home, and the office practice of medicine. Forgotten, a victim of the rapid advance in conquering infection, was the hard learned basic fact that cleanliness was indispensable to the practice of medicine. Intelligent and reputable men, the teachers and leaders in all fields of medicine, have allowed short cuts in procedure to take place, thereby permitting established rules of medical sanitation to be broken.

Early warnings of potential danger were heeded by only a few and, for practical purposes, were ignored by the whole field of medicine. The relaxation of routine by the leaders of medical practice encouraged others among their associates to ignore regulations which previously had been even more inviolate than the Ten Commandments themselves. Now we see our antibiotic armor pierced at will by antibiotic resistant organisms and realize that we are resuming a battle fought for the purpose of regaining an essential objective, namely, the control of infection. Those of us in the front ranks in the battle against disease have prime responsibilities for the strategy of the battle; little can be delegated to others, and none can be ignored.

It should be apparent that the magnitude of the problem is such as to deserve the strict attention of every physician in practice not only as it concerns his own patients, but also because it demands that he be instrumental in activities which will influence hospital personnel from the administrators themselves to orderlies; and militantly to advise hospital architects and boards of governors to alter or devise hospital facilities to be such that hospital cross-infection is eliminated as a hazard. We cannot sit back to wait for some basic scientist to make the discovery which will allow us to hope that something will turn up to solve our problem. Experience dictates that dedicated efforts are required. The fundamental laws and rules of hygiene and sanitation are essential to follow. We must abide by them and enforce their practice.

The knowledge that is required for the control of staphylococcal disease is already available and awaits only the dedicated application of this knowledge by the physician and all of his associates that constitute the health team in modern hospital operation.

—ARILD E. HANSEN. M.D., Ph.D., Galveston.

Let Freedom Ring

The right of freedom of choice by patient and by physician is important both to the public and to the medical profession of Texas. The House of Delegates of the Texas Medical Association left no question about its views on this point in its action in San Antonio last month.

A half dozen resolutions on the subject were introduced in the House in response to a request from the Delegates to the American Medical Association for instructions in regard to a report on medical care plans which will be under consideration when the AMA House convenes in June. Although action was taken on these individually, the attitude of the Texas House can be summed up in the statement of the Reference Committee on Medical Service and Public Relations adopted by the House:

> The Committee recommends . . . that all patients have free choice of physician, and this concept is to be considered a fundamental prin-

ciple, incontrovertible, unalterable, and essential to good medical care without qualification . . . this Committee is opposed to closed panel systems and disapproves of physician participation in these systems which restrict the patient in his choice of physician.

In some respects Texas is not confronted so directly with the problem of panel medicine as many other states, for the Medical Practice Act in Texas stipulates that only physicians who are duly licensed can render professional services. All third parties which employ physicians to practice for them are in violation of Texas law, and physicians who lend their licenses to this type of practice also are violators.

At the same time, Texans must remain alert. H. B. 213, which was introduced into the Texas Legislature this spring, would permit nonprofit corporations and associations to employ physicians on a salaried basis and to receive fees for doctors' services. Such legislation if adopted in effect would authorize corporate practice or panel medicine. There had been little doubt about the attitude of most Texas doctors toward such legislation or free choice in general. The action in San Antonio seemed conclusive.

Change of Tune

The cost of living continues to spiral up and up, yet members of the Texas Medical Association have the novel—for this day and age—experience of a decrease in their cost of living: a reduction in membership dues effective January 1, 1960.

Upon recommendation of the Reference Committee on Finance and the Board of Trustees, the House of Delegates took action to reduce dues from $50 per year to $45. Expenses in connection with erection of a headquarters building, for which $15 in dues was authorized in 1948, will have been covered during this calendar year. Although the Trustees requested and received $10 of this amount to take care of expanded and increasingly expensive service programs and other projects of the Association, as well as maintenance, repair, and minor remodeling of the building, total dues will be cut back by $5 beginning with the next fiscal and membership year.

The amended by-laws providing for the new dues total indicate that the $45 shall be divided into $3 for the *Journal* and $42 for the General Fund. The General Fund may be divided by the Trustees "into such funds as may be for the best interests of the Association, and [they] may make appropriations therefrom to meet the requirements of the Association. The Trustees shall maintain a Contingency Fund to be used to meet . . . emergencies . . . ." The Medical Defense Fund and the $1 of dues allocated to it were eliminated, although the educational and service program previously financed from this fund can be continued. Also, the Trustees will continue to allocate $1 of each dues to the Woman's Auxiliary as has been done annually since 1949 following a request to this

Annual Session Marked by "Firsts"

Several important "firsts" marked the ninety-second annual session of the Texas Medical Association in San Antonio April 18-21:

For the first time in its 106 year history, the Association elected a woman—Dr. May Owen of Fort Worth—as President-Elect.

For the first time, the big medical meeting was serviced by a daily newspaper, the *Annual Session Reporter*, which was published through the courtesy of the Great American Reserve Insurance Company and edited by Bill Robertson, Texas Medical Association public relations director.

For the first time, transportation between convention hotels was provided by the "Mission Pharmacal Express," greatly adding to the convenience of physicians during a crowded convention schedule.

Also for the first time, the historic Texas Alamo was the scene of an impressive Memorial Service—that traditionally conducted by the Association during its annual session each year in memory of deceased members.

And, finally, although the Association convention has been held in San Antonio several times, this was the first year the session was planned to coincide with the gala Fiesta de San Jacinto, giving visiting doctors and their families an opportunity to combine a pleasant vacation period with the business of the medical meeting.

See *Details, Organization Section*

effect from the House of Delegates in 1948.

Membership dues for interns and residents will be $3 per year (instead of $4) to cover subscription to the *Journal*. Military, honorary, and inactive members will continue to pay no dues, but may subscribe to the *Journal*.

Texas doctors can take satisfaction in the fact that they have a handsome, functional headquarters building clear of debt within this year, 3 years earlier than the mortgage agreement allowed. They can be glad there is a reserve fund available for emergencies. Finally, they can be grateful that an excellent program of services to the membership and the public, solidly financed, can be still further expanded in the future through the release for these general uses of monies previously earmarked solely for building purposes—and with an over-all saving in their dues payments to the Texas Medical Association.

Full Steam Ahead!

As the Texas Medical Association begins a year with a new administration, the fact of recent dynamic growth is apparent and the prospect for even more significant growth in the future seems certain.

This year Association membership has reached 8,000 and produced an eighth seat for the Texas delegation in the American Medical Association's House of Delegates. But, on the basis of predicted growth, the membership will have zoomed to 14,300 by 1975.

Far-reaching organizational changes in the basic structure of the Association, necessitated by increased membership and expanding services, were voted during the April annual session in San Antonio. But there is no doubt that future study and adjustments will always be required.

During 1959, the mortgage on the Austin headquarters building of the Association will be paid off in full, thanks to every dues-paying member. But even as this *Journal* went to press, work was beginning on a much needed $15,000 remodeling of the physical plant in order to make present space more usable.

A variety of comparative figures selected at random lend further support to the growth story. Where total Association revenue was $141,307 in 1948, it was $356,304 in 1958. Where there were 28 Association councils and committees in 1954, there are now 38 very active ones, including 354 doctor-committeemen. The Memorial Library's handling of 3,000 reference requests last year marks a 91 per cent increase over 1953.

In such areas as physician placement, legislative action, insurance programs, relations with other groups, *Journal* advertising revenue, and annual session activities, growth and improvement are also evident.

The Texas Medical Association, in other words, is becoming one of the biggest and most influential professional organizations in the state.

This obviously places the Association on a spot. It can neither rest on its laurels, expect its mistakes to go unnoticed, nor allow itself to drift into aimless organizational meanderings.

Most important, if the Association is going to continue to grow, it must grow with direction! As years go by, the Association's financial structure must go hand-in-hand with existing or contemplated services, new ideas must be welcomed and organization deadwood cut away, the legislative picture and the quality of health services to Texas citizens must be constant concerns.

Let us urge our "best brains" among Texas doctors to set themselves to brainstorming now —so that whatever direction the Texas Medical Association does take in the future, its course will have been charted wisely.

President's Page

A BIG JOB—FOR ALL

DR. YEAGER

In my first message to you as your President, I want to discuss a few points in general.

I thank you for expressing confidence in me. The job is big, but I intend to do the job the way I see fit and not according to any dictates of custom or politics.

This is your organization. When you elect officers, you have only begun your job. Any organization with active officers and an inactive membership is a bee without a stinger. The voice of medicine will be strong only when every member takes an active personal interest in the organization. Our aim must be to increase our unity and strength each year.

Every man who wishes to take an active role in our organization should be given that chance. I will appreciate hearing from any such doctor and will do my best to see that he is placed in a position where he can work.

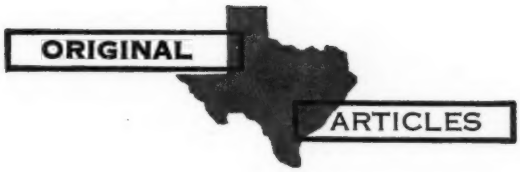
My first aim this year will be to get the story of medicine before the public. When one speaks to doctors, the good is chiefly fraternal. The *public* must be made to know medicine's side of the story. The people must know that we are primarily a scientific organization with our chief aim to maintain and improve their health. They must know that in our organization membership is not taken lightly; that we jealously guard the title of M.D. against such things as fraud, mistreatment, or unprofessional conduct.

Later, we will emphasize attendance, the value of grievance committees, the work done by our Board of Trustees, the importance, power and value of our Councilors, and the individual doctor as the representative of the Texas Medical Association.

I will welcome any criticisms or comments you may have at any time. I trust you will do the same.

Let's put our shoulders to the wheel and work together for a stronger and more unified organization of which we can be justly proud.

F. W. Yeager, M.D.



Staphylococcal Infections

A Symposium from The University of Texas Medical Branch

Guest Editor:

ARILD E. HANSEN, M.D., Ph.D.

Galveston, Texas

Hospital Population Most Vulnerable to Staphylococcal Infection

HARRIET M. FELTON, M.D.

Galveston, Texas

MORE THAN 15 years ago preliminary drawings of the new John Sealy Hospital of the University of Texas Medical Branch were prepared. As in the case of many hospitals planned and built at that time, the architectural design reflected the thinking of the times, namely, that antibiotic therapy had solved the infectious disease problem. The 10 years between preliminary drawings and occupancy is not unduly long in the story of hospital planning and construction. In medicine it can mean an era.

Rather ironically, the very year of dedication of the great monolith, so sturdily built as to defy the mighty winds of a hurricane, there appeared in the literature a report of a potentially serious hospital hazard.[8] This concerned the appearance of antibiotic resistant pathogenic staphylococci in patients in the Boston City Hospital, 2,500 miles away.

Within the next 2½ years the problem of hospital strains of resistant staphylococci had reached such magnitude that reports were appearing not only from the North America continent, but from as far away as Australia. Because of the pioneer work of such investigators as Colebrook[6] in England, Colebeck[5] and Bynoe[4] in Canada, Rountree[9] in Australia, and Blair[3] in this country, laboratory techniques for the detection of these organisms had been developed and recommendations made for controlling outbreaks of staphylococcal infection. The medical world suddenly realized that although much had been learned of the nature of many infectious disease agents, there had been practically no fundamental advancements in the understanding of staphylococcal disease since the advent of the sulfon-

The Director Comments . . .

In responding to the gracious invitation of the Texas State Journal of Medicine to undertake the editorship of an issue of the Journal, the faculty of the University of Texas Medical Branch in Galveston could have chosen many subjects less sensitive, less complex, and indeed less risky than the problem of Staphylococcus aureus infections and their control.

Deriving our data largely from direct observation and study in this medical center, we assert that the thoroughness of our investigations offers presumptive evidence of a serious problem actually present in many hosiptals, potentially prevalent in many more.

Significantly, it is rare that the staphylococcus fatally strikes the healthy person. More frequently it appears to be a coup de grace in certain cases of long-standing, debilitating illness. This may be the major reason it is not more generally recognized.

Semantically, one may raise a question on the use of the phrase "scourge of epidemic staphylococcal disease" by Dr. Harriet Felton, but her tireless thorough pursuit of the problem has revealed enough evidence of staphylococcus subtlety and insidiousness to give us respectful pause.

Statistically the scientist could wish that all hospitals be subjected to as critical self-analysis and search for the staphylococcus as has ours. Our findings, however, are more compelling upon such hospitals to take measures immediately for control and prevention along the lines which our experience and that of others has proven extremely effective.

—JOHN B. TRUSLOW, M.D.,
Executive Director,
University of Texas Medical
Branch, Galveston.

amides. It soon became apparent that the problem was complicated by the fact that an antibacterial therapy had become easier and better; there had evolved a laxness in many hospital techniques regarding the rules which previously had prevented effectively the spread of infection within hospitals. In recent years infectious disease units rarely have been included in new hospital construction.

The scourge of epidemic staphylococcal disease first affected the large general hospitals, but is now present to some degree in most smaller institutions. Anyone harboring the idea that the problem will "just go away" is truly unrealistic and not acquainted with the facts. One of the most important factors in keeping the infection rate down is the prompt recognition of staphylococcal disease and the institution of measures necessary to protect the most susceptible patients in a hospital. It is now well known that the newborn infants and their mothers constitute the most vulnerable portion of the hospital population.[10] Circumstances conducive to infection among other patients are still not completely understood. It is, therefore, important that clinicians be aware of the nature of staphylococcal disease and know something of the mechanisms fostering human susceptibility.

EXPERIENCE AT JOHN SEALY

It is believed that the experience within the John Sealy Hospital is demonstrative of the staphylococcal disease as it could and does affect any modern hospital. This experience is of particular value because the situation has been followed closely from the beginning by clinical, laboratory, and statistical means and has never reached the cataclysmic proportions that have existed in some other institutions.

When the first outbreak occurred in the nurseries in the fall of 1956, through the cooperation of the Department of Microbiology, the University of Texas Medical Branch was fortunate in being able to provide augmented laboratory facilities for the complete identification of all strains of staphylococcus isolated by the clinical laboratories of the hospital.[2] As a result of the establishment of rigid control measures which included survey nasal cultures of all personnel responsible for care of the babies, there have been no deaths among babies born in this hospital since these measures were instituted. Except for one period following a severe

Dr. Harriet M. Felton is professor of pediatrics at the University of Texas Medical Branch.

Hospital acquired staphylococcal disease has been fairly well controlled at John Sealy Hospital, although 33 of 236 patients who acquired a Staphylococcus aureus phage 80/81 infection in the hospital (out of 12,458 admissions) died. The very old, the debilitated and chronically ill, and severely stressed patients were most vulnerable.

TABLE 1.—*Hospital Admissions, Frequency of Hospital Acquired Staphylococcal aureus Phage Type 80/81 Infections, and In Hospital Deaths.**

Total Admissions	Total Hospital Acquired Staph. aureus Phage 80/81 Infections	Deaths Associated with Staph. aureus Phage 80/81 Infections	
		No.	%
12,458	236	33	6.4†

There were 6 additional deaths in which other resistant Staph. aureus was either causal or contributory during this period.

*In all instances the staphylococcal disease was either causal or contributory.

†This figure is calculated from the total hospital deaths during the 9 month period.

TABLE 2.—*Summary of Infection and Mortality Rates by Months.*

Month	Mortality Rate/1,000 Admissions	Phage 80/81 Mortality Rate/1,000 Admissions	Total Hospital Acquired Staph. aureus Phage 80/81 Infections/1,000 Admissions	Total Admissions
March	48.6	5.9	45.1	1,353
April	46.4	2.3	26.7	1,271
May	47.8	3.8	13.6	1,316
June	44.7	2.2	17.7	1,350
July	33.4	3.4	13.7	1,465
Aug.	45.9	2.0	14.6	1,503
Sept.	30.4	1.4	10.8	1,478
Oct.	43.9	0.7	14.6	1,433
Nov.	32.5	2.3	15.5	1,289

TABLE 3.—*Pertinent Data from Patients Who Died.**

No.	Sex	Age (yr.)	Condition Requiring Hospitalization	Hospital Stay (days)	Staphylococcal Disease	Staph. aureus Type
			MARCH			
1	M	46	Burn	60	Brain abscess	N.T.M.R.†
2	M	18 da.	Intestinal atresia	8	Peritonitis Wound dehiscence	80/81
3	F	67	Diabetes	26	Pneumonia	80/81
4	F	55	Diabetes, hemiparesis	34	Decubitus pneumonia	80/81
5	M	40	Leukemia	12	Sepsis	80/81
6	F	73	Myocarditis	19	Decubitus	80/81
7	M	60	Rheumatoid arthritis	102	Pneumonia	80/81
8	M	66	Tetanus	5	Pneumonia	80/81
9	F	57	Cholelithiasis	62	Pneumonia	N.T.M.R.
			APRIL			
10	M	18	Chr. cardiorenal disease	12	Pneumonia	80/81
11	M	71	Amputation (arteriosclerosis)	30	Pneumonia	N.T.M.R.
12	F	55	Malnutrition, decubitus	140	Pneumonia	I.M.R.
13	M	4	Leukemia	62	Pneumonia, sepsis	80/81
14	M	64	Traumatic subdural effusion	6	Pneumonia	N.T.M.R.
15	F	73	Chr. pulmonary disease	8	Pneumonia	80/81
			MAY			
16	F	43	Meningitis, visceral abscess	20	Brain abscess	N.T.M.R.
17	F	46	Lupus erythematosus	16	Decubitus sepsis	80/81
18	F	58	Glomerulonephritis	28	Sepsis, pneumonia	80/81
19	F	62	Dermatitis (Candida)	16	Sepsis, pneumonia	80/81
20*	F	12	Leukemia	24	Cellulitis of finger	80/81
21	M	8 mo.	Moniliasis, hypogammaglobulin	47	Pneumonia	81
			JUNE			
22	M	35	Hodgkin's disease	261	Decubitus pneumonia	80/81
23	M	29	Electric burn	21	Sepsis, hemopneumothorax	80/81
24	M	84	Fractured hip	58	Osteomyelitis, inguinal abscess	80/81
			JULY			
25*	M	47	Diabetes, uremia	271	Ascending gangrene	80/81
26	M	70	Subtotal gastrectomy	42	Submaxillary adenitis, pneumonia	80/81
27	M	60	Peptic ulcer	15	Sepsis, pneumonia	80/81
28	M	42	Hodgkin's disease	87	Pneumonia	80/81
29*	F	52	Hodgkin's disease	3 (terminal)	Furunculosis	80/81
			AUGUST			
30	M	12	Lymphosarcoma	134	Cellulitis of finger	80/81
31	M	21	Dwarfism, diabetes	23	Pneumonia	III M.R.
32*	M	54	Diabetes, otitis media	30	Furunculosis, decubitus sepsis perinephric abscess	80/81
33*	F	60	Ca. of cervix, uremia	12	Furunculosis	80/81
			SEPTEMBER			
34*	M	68	Spastic paraplegia	52	Decubitus pneumonia, pyopneumothorax	80/81
35	M	53	Postop. chest surgery (graft of aorta)	28	Postop. wound infection, pyopneumothorax	80/81
			OCTOBER			
36	F	68	Metastatic ca. of breast	25	Cellulitis of breast	80/81
			NOVEMBER			
37	M	67	Brain tumor	58	Decubitus	80/81
38*	F	77	Diabetes	24 hr. (terminal)	Sepsis	80/81
39	F	30	Pituitary adenoma	15	Pneumonia	80/81

*Multiple hospitalization here within past year.
†N.T.M.R. = Nontypable multiple resistant.

personnel shortage during which nasal carriers under treatment had been allowed to be on duty, there has been no significant infection reported in newborn infants.[7]

The protective measures set up around the most susceptible patients in the hospital were successful in controlling the nurseries, but as in other institutions the problem gradually became evident in other hospital areas.[11] This insidious spread has been recognized to be an attribute of the organism, and the pattern has been described over and over again by hospital administrators and physicians.

In the fall and early winter of 1957-1958 cases of staphylococcal infection occurred with increasing frequency on several wards. It was then decided that broader control measures were required. As a result of this a Surveillance Committee was appointed in February, 1958, by the hospital chief-of-staff to be advisory to the administrator of hospitals. Within a 2 week period following the establishment of this committee an adult isolation unit was opened and rules drawn up and put into operation for the improvement of hospital hygiene. An Infectious Disease Service was set up which included a personnel treatment center and a carrier control clinic. This concerted program resulted in a marked drop in the number of infections within the first month and a gradual further decline during subsequent months. This rate has followed the decrease in the incidence of lesions among the personnel and reflects the efficacy of the carrier control program. The details of this and the successful application of the control program have been discussed elsewhere.[1]

As a result of the intensive control program the detection of staphylococcal infection was quite complete. In agreement with the reports of others, some mortality occurred. The data herein reported represent one of the few instances where the mortality can be set against its proper background of total staphylococcal morbidity in order to reveal the relative susceptibilities of various types of hospital patients. Wysham and Kirby[12] reported similar data from a hospital in the north central United States.

The total hospital admissions over the period of this study and the frequency of infection with Staphylococcus aureus phage type 80/81 are summarized in table 1. The number of deaths in which these organisms were deemed to be either causal or contributory is also given. Since this is a large general hospital serving as a state diagnostic and treatment center the patients admitted are exceedingly diverse in respect to diagnoses, physical condition, and history of previous hospitalizations.

The incidence of Staph. aureus phage type 80/81 infections and total hospital admission as well as the relationship between the total deaths and the deaths in which this infection was causal or contributory are presented in table 2. It can be seen that there has been a downward trend in the number of infections.

Pertinent information concerning the patients who died is given in table 3. The classification of these patients into several broad categories completes the picture of the most vulnerable hospital population: the very old; the debilitated and chronically ill, for example, diabetics and patients with blood dyscrasias and malignancies in whom the natural defenses of the body have been disturbed; and the severely stressed patients, for example, those with severe burns or following extensive surgery.

As indicated from these data (table 3) some of the characteristics of these patients who are a poor hospital risk are emphasized. Sex is not a factor, there being 16 females and 23 males. Severe stress had been experienced by 7 patients. The debilitated and chronically ill patients included 6 diabetics, 3 patients each with leukemia and Hodgkin's disease, and 4 patients with malignancies. Age plays an important role, 16 being 60 years or older. All 5 infants and children were suffering from conditions in which the prognosis is very poor. An outstanding feature is the length of hospital stay: 33 patients had been in the hospital 12 days or longer, and 6 patients had been in this hospital several times during the period of the study.

In contrast to the patients who are highly vulnerable to serious staphylococcal disease, healthy personnel who have contracted the infection have fared decidedly better. Of an average of 2,500 personnel, 61 developed lesions from which pathogenic staphylococci were cultured. There were no deaths in this group as described by Wolma and Rowe in this issue of the *Texas State Journal of Medicine*.

The fatality rate was found to vary from 5 to 28 per cent with an over-all average of 13.9 per cent during this 10 month interval. In other words, 1 of every 7 patients who acquired Staph. aureus phage type 80/81 infection died either directly or indirectly as a result of staphylococcal disease.

The treatment of patients with resistant staphylococcal infection is far from satisfactory; hence, in order to combat the problem it is necessary to prevent the development of hospital acquired infection insofar as possible. The techniques for this have been pointed out in other presentations in this series.

As this article is concluded there is evidence accumulating that although the problem of hospital acquired staphylococcal disease has been fairly well controlled within this institution, patients and personnel are coming in from the outside with this dreaded organism already established in their nares or at various other sites of their bodies. Therefore

it is obvious that the second and more complex stage of this problem has already begun. When hospital acquired staphylococcal disease appears in the community, additional measures must be taken to control the problem. In addition, with the spread of these organisms into the general population it must be remembered that there are many patients with predisposing illnesses who are outside of the hospitals; hence, it is quite probable that the practicing physician caring for these patients will continue to encounter some type of staphylococcal disease in his practice.

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Cardiacs Better at Work

The outlook for working heart patients today is far brighter than it was a decade ago, Dr. Leonard J. Goldwater, a research specialist from New York, reported at the meeting of the Vermont Heart Association recently. Strong evidence now is available that their outlook is probably better than it would be if they stopped working.

Long periods of idleness such as those necessitated by prolonged legal proceedings may result in physical and psychological damage that far outweigh any financial benefits the patient receives, said Dr. Goldwater. Fear on the part of a patient that dire consequences may follow resumption of employment can be more disabling than the underlying lesion in the heart, he said.

Epidemiology of Staphylococcal Hospital Infection

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WITHIN THE PAST several years, hospitals all over the world have been experiencing an increase in the number of in-hospital staphylococcal infections. In almost all instances, the organisms causing these outbreaks have been found to be resistant to at least one antibiotic. Usually, insusceptibility to several agents has been noted, the most common pattern being that of resistance to penicillin, streptomycin, the tetracycline drugs, and in some instances, erythromycin.[3] These organisms have often been designated "hospital strains," since multiple resistance has been observed only rarely among staphylococci in the general population, even though in some studies the multiple resistant strains have been looked for specifically.

Much emphasis has been placed on the role of antibiotic resistance with regard to the increased number of staphylococcal infections. The introduction of phage typing techniques, however, has shown that only certain strains among these organisms appear to possess marked virulence and communicability. Outstanding among these are the so-called phage type 80/81 strains, which not only have been implicated in explosive epidemics among newborn infants, but also have been responsible in the past 2 years for a major portion of staphylococcal infections of varying

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Staphylococcal infection may be carried from one medical center to another. In a hospital, hospital personnel with lesions who continue normal duties in patient areas probably constitute the greatest transmission hazard; infected patients, carriers without lesions, and fomites also are implicated. The organisms undoubtedly are spread to the community and may become endemic.

severity in adults hospitalized for reasons unrelated to staphylococcal infection.[1, 3, 7]

Although it is seldom possible to identify the first introduction of a communicable and invasive staphylococcal strain into a hospital, the pattern of spread throughout the country has suggested that these organisms may be introduced by individuals who have carried them from one medical center to another. It is therefore not surprising that the larger hospitals, with a greater number of referrals from other areas and a more active turnover in professional personnel (that is, interns, residents), are usually the first to be affected when the infection is introduced into a geographical area. Whether this transmission has occurred by way of professional personnel, nonprofessional personnel, or patients probably has varied in different locations. The fact that these organisms colonize in the noses and on the skin of otherwise healthy persons, contributes considerably to the ease and probability of transmission.

Once carriers or cases have been imported into the hospital environment, they disseminate their organisms into their surroundings with the consequent infection of other people either directly or through the contamination of objects with which they come in contact. In the large proportion of hospital staphylococcal epidemics, the situation is first recognized because of an explosive outbreak of staphylococcal infection in the nursery.[7] Nurseries keeping newborn infants more than 3 days are the ones most likely to experience difficulty. The infections may vary from pustular dermatitis and breast abscess to lethal staphylococcal pneumonia and septicemia. It should be noted that when infection is seen in a newborn nursery, there usually are a still greater number of infants who develop infection only after leaving the hospital and entering their home environment. At home, they may transmit organisms not only to the nursing mother where breast abscess is common, but also to other members of the family where recurrent boils and furuncles may occur.[5, 10, 11]

Since nursery epidemics usually represent the first and spectacular part of the invasion of the hospital environment by virulent and communicable antibiotic resistant staphylococci, the impression has been gained that staphylococcal infection is predominantly a problem of newborn infants. However, there is ample evidence that adults with decreased resistance, either because of age, illness, or extensive surgery, are highly susceptible to these organisms, with infection frequently manifesting itself in the form of pneumonia or septicemia.

Nonetheless, the progression of staphylococcal infection into the general wards of a hospital is usually quite insidious, sporadic infections occurring with gradually increasing frequency. Therefore, the recognition of an epidemic situation in adult patients is frequently delayed until several serious infections or even deaths have occurred within a short period of time. With the spread of clinical infection throughout the hospital there is a concomitant increase in the number of carriers among the hospital personnel. In our own hospital a carrier detection survey was conducted in January, 1957, following a nursery epidemic which had been eliminated by the application of localized control measures. Subsequently in March, 1958, when infections were appearing in other areas of the hospital, a re-survey was made. Table 1 gives the distribution of personnel carriers in both surveys. These figures show that the number of carriers had more than tripled in the interval and that most of the increase occurred in personnel having frequent contact with patients.

TABLE 1.—*Number of Carriers of Phage Type 80/81 Staphylococci Found in Carrier Surveys.*

Type of Personnel	January, 1957	March, 1958
Medical staff on wards	7	32
Nurses		
On wards	27	95
Not on wards	5	1
Service personnel		
On wards	7	12
Not on wards	1	11
Medical students		
On wards	4	25
Not on wards	3	2
Technicians	0	6
Maintenance staff	2	2
Total		
On wards	45	164
Not on wards	9	14

There is ample evidence that infected carriers without lesions may transmit the organisms to others, including patients, other hospital personnel, and members of their own families. Moreover, we have observed that approximately one-third of the carriers of 80/81 staphylococci eventually have developed lesions themselves, which in some instances have been recurrent over a period of months.

In a hospital environment, after a significant number of patients and personnel are colonized by staphylococci, it is obviously difficult to incriminate unequivocally any one means of transmission as being the most important in the spread of staphylococci. Under varying local circumstances there has been evidence of direct person-to-person transmission, as well as transmission through fomites that have come in contact with both patients and carriers, notably, objects and materials such as dressings directly contaminated by infected exudates. Although air-borne droplet transmission over short distances may occur,[8] there is no clear evidence that staphylococci in the air of wards and nurseries has mediated the spread of infection through hospitals.

Although transmission may occur simultaneously by several routes, it is our opinion that the contribution of different modes of transmission is relative to the number of organisms that they make available to a susceptible recipient. This suggests the greater transmission significance of direct contacts with cases or carriers than contacts with secondarily infected environments. On this basis it would follow that members of the hospital personnel who have lesions and continue their normal duties in patient areas constitute the greatest transmission hazard. Such people are mobile, carry a high concentration of organisms on their persons, and come into direct contact with susceptible individuals. A serious but lesser hazard is the infected patient, who may have a high infection density but is immobilized through illness. Personnel who are asymptomatic carriers are "transmitters," but not to the extent of the two categories just named. Finally, the patient without staphylococcal lesions who is a carrier probably contributes least to the spread of staphylococcal infection within hospitals. Considerations of infection frequency in relation to environmental staphylococcal density indicate that even susceptible persons require a sizable dose of organisms to initiate infection compared to the number of infectious units required to initiate infection in certain other contagious diseases.

In view of the fact that patients and personnel of hospitals are also members of the surrounding community, it is almost inconceivable that the organisms responsible for staphylococcal disease would fail to extend into the community at large. Although few studies have gone beyond the immediate families of hospital personnel and patients,[6, 9, 10] we have traced one infection which illustrates some of the features in community transmission. In this instance, a child leaving the hospital after an otoplasty was discharged with a few small pustules on his neck. He then resided temporarily with a local family. The child of this family developed boils and subsequently infected his mother, his visiting grandparents, and two playmates residing in the same apartment house. The grandparents, returning to another city, are known to have had recurrent boils requiring medical attention for a period of several months. Phage typing indicated that the organisms isolated from all of these patients represented a single strain.

There also is indirect evidence that these strains eventually may become endemic in the general population having negligible contact with hospitals. In table 2 are given the results of carrier detection studies performed on all new personnel employed in our hospital during the months of June and July, 1958. It can be seen that the frequency of carriers of phage type 80/81 staphylococci among the nonprofessional and nontechnical group was almost as great as among the professional and technical group. Since the nonprofessional and nontechnical group was recruited largely from the local community and had not had extensive contact with hospital environments, these results suggest a significant incidence of phage type 80/81. These data also illustrate the problem of the importation of trouble-making staphylococci into the hospital environment through the employment of new personnel.

TABLE 2.—*Carrier Rates Among New Personnel Employed in June and July, 1958.*

Kind of Employment	New Personnel	Phage Type 80/81 Carriers	Carrier Percentage
Professional and technical	130	18	13.8
Not professional or technical	128	15	11.7
Total	258	33	12.7

The interplay between the hospital and the community in regard to staphylococcal transmission is complex. In the early stages of the introduction of these contagious, antibiotic resistant strains, the hospital may be seeding the community. However, with proper internal precautionary measures it is possible at least to reduce the infection density within the hospital environment.[1, 4] Under these circumstances the role of the hospital and the community may be reversed, and the community then may begin to reseed the hospital unless additional precautions are designed to prevent this occurrence.

From the epidemiological information that has been presented it is clear that the staphylococcal infection problem does not consist merely of the occurrence of explosive localized outbreaks that may be eliminated by localized intensive control measures of short duration. Rather, there is a usually insidious invasion of both the hospital and the community that we believe will result in the continuing presence of potentially dangerous organisms in both environments. Therefore, even though control measures in hospitals must be designed to prevent localized outbreaks in nurseries and individual wards, these will be effective only to the extent that other, more long range, procedures are adopted based on the realization that staphylococcal infection, once it is established in an area, is an endemic disease that may become epidemic at any time under the proper circumstances. Long range control may necessitate profound changes in hospital management, personnel training, and physical design, and certainly will require a return to the strict adherence to basic aseptic techniques in nursing procedures and general medical and surgical practices.

The control of staphylococcal infection in the general community is beset by very considerable problems. Although generalized epidemics do not

appear likely, familial and other localized epidemics are a distinct possibility. If the physicians of the community recognize the contagious nature of staphylococcal infection and instruct their patients accordingly, it is probable that spread within the community could be retarded. It is also likely that the detection and treatment of carriers within the families of infected patients would be a practical and significant control measure to apply in the community.

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AMA Reports on Medical Schools

American medical colleges had a record enrollment of 29,473 students in 1957-1958, reports the American Medical Association's Council on Medical Education and Hospitals. In a report which illustrates some of the changes and developments being made in medical schools to meet the changing medical needs of the American people, the council states that an estimated $275,000,000 was spent this year. Sixty of the 85 operating medical schools reported major construction, costing $47,000,000. Of the 85 medical colleges, 78 are approved 4 year colleges of medicine. A total of 6,861 physicians was graduated from these schools in 1958.

Staphylococcal Pyoderma and Mastitis in Infants And Children

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Pyoderma and mastitis may warn of a staphylococcal epidemic; may be precursors of dangerous complications in infants; and are an abundant source of organisms hazardous to all contactants. In the infant even the mildest Staphylococcus aureus infection necessitates antibiotic therapy; older, otherwise healthy children, may require only local treatment.

PYODERMA and mastitis have a singularly significant role in the general staphylococcal problem. Three important aspects warrant consideration: (1) Easy visibility of the lesion makes prompt recognition inevitable; hence, an increase in the incidence of such infections in a given population may become evident prior to the appearance of the more devastating manifestations of a staphylococcal epidemic. (2) They are frequent precursors of dangerous complications in young infants or children suffering from chronic illnesses, surgical wounds, or conditions requiring steroid therapy. (3) The open skin lesion constitutes an abundant source of organisms which are hazardous to all contactants either direct or indirect.

During a recent outbreak of staphylococcal infections at John Sealy Hospital, these points were illustrated. The appearance of mastitis and pyoderma among the newborns in August, 1956, was the prologue to a chronic hospital-wide staphylococcal problem which has had many exacerbations and remissions. Since then, the incidence of these infections in the nursery on a seasonal basis has varied from 0 to 13 per cent, the latter being found with the

increased number of births during the fall months.

An opportunity to observe and follow for 1 year 420 infants born in John Sealy Hospital was afforded by a special nutritional study which was in progress from May, 1956, to November, 1958. These infants were seen at monthly intervals by the same pediatrician, and careful histories of infection were obtained. In this group, following dismissal from the hospital, 45 developed pyoderma and 8 mastitis. This would seem to indicate that at least as many skin infections occurred after hospital discharge as during the nursery stay.

A few months after the skin infections had been noted among the newborn infants, other hospital areas became alarmed by the increasing incidence of empyema, pneumonia, sepsis, and wound infections. Subsequently with each recrudescence of dermatological lesions hospital personnel learned to be alert for the appearance of the more serious diseases.

Since the most serious complications occurred in the young infants, chronically ill, surgical, or steroid treated child, even the mildest pyoderma in these individuals caused immediate concern. Empyema and pneumonia were preceded by skin lesions in 7 out of 19 instances while in the 10 children with sepsis due to Staphylococcus aureus 4 had impetigo initially.[2]

The marked communicability of this type of infection was often demonstrated in a family group in which skin lesions due to the same organism recurred repeatedly among several of its members. The source of infections in a family group often could be traced back to the arrival of a newborn infant in the household. Such a cycle was difficult to break without adequate treatment of the entire family. Likewise on the hospital wards an open skin lesion in one child was the source of many other Staph. aureus infections among the patients.

CLINICAL MANIFESTATIONS

Pyoderma.—The manifestations of pyoderma vary with the age of the patient. In the newborn the distribution is usually in the groin, neck, and diaper region, and the lesions are small, discrete, superficial pustules with little induration at the base. The spread is most often contiguous and only occasionally becomes confluent or widespread. With proper therapy lesions disappear within a few days. In older infants pyoderma may complicate miliaria and become a more serious disease requiring hospitalization. In the older child single large abscesses involving deeper skin structures are more apt to occur. Often the causative organisms are found to be penicillin and/or erythromycin sensitive in contrast to those infecting the younger age groups. Systemic signs and symptoms are absent in all ages unless complications occur.

Mastitis.—Mastitis may be noted while the infant is still in the nursery or as late as 10 weeks after discharge. It is not seen in the older infant or child. In our experience the usual incubation period is 3 weeks. The initial enlargement and induration is difficult to distinguish from the physiological breast hypertrophy often seen in the newborn. Redness, increased induration, and warmth rapidly progress to fluctuation. Involvement is more frequently unilateral than bilateral. In our hospital there seemed to be a proclivity of the phage type 81 strain to infect breast tissue whereas no such tendency was exhibited by the other variants.

TREATMENT

The prevention and treatment of skin infections represent an important part of the hospital staphylococcal control program. The aspect of prevention is most crucial in the newborn nursery. However, the intelligent planning of preventive measures is handicapped by the fact that our understanding of the mode of transmission of staphylococcal infection is not a matter of universal agreement. Various investigators have emphasized the importance of nasal carriers among the personnel while others stress the role of air contamination and fomites.[1, 3, 4, 5] Until our knowledge of these problems has increased, a practical program of prevention in the nursery unit must incorporate both theories. Certain basic principles have been generally adopted:

1. A constant teaching and educational program is imperative to indoctrinate medical and nursing students, aides, nurses, and physicians in regard to the importance of cleanliness and aseptic technique in handling infants. The reporting of personal infections such as abscesses, paronychias, and other skin infections is mandatory and should not be accompanied by monetary loss.

2. All personnel, both obstetric and pediatric, working in this area should have nasal cultures at regular intervals. Persistent nasal carriers of the hospital strain of staphylococcus should be given duties elsewhere. The number of individuals having access to the area should be limited.

3. Handwashing with a hexachlorophene containing solution between each infant contact must be enforced.

4. Mask, cap, and gown technique should be used by the transient personnel who visit the nursery. Clean scrub dresses may be worn by the nurses remaining in the area. The scrub dress should be cov-

ered by an isolation gown when the individual leaves the nursery.

5. Bathing of infants daily or every other day with a hexachlorophene containing soap or detergent is effective in eliminating most skin infections during hospitalization. However, it does not seem to prevent late infections nor nasal colonization.

6. Diagnostic and other equipment used in infant care should stay in the nursery. All such items should be cleaned with Zephiran (aqueous solution of benzalkonium chloride) about 1:4,000 dilution or some other antiseptic solution between each use.

7. Special attention should be given to housekeeping techniques. Control of dust by wet mopping with germicidal solutions is recommended.

8. The ventilating system should be examined carefully for sources of contamination.

9. Overcrowding of the nursery should be avoided by early dismissal of infants when necessary.

10. Cultures must be taken from all persons with clinical infection. Phage typing and sensitivity studies should be done if preliminary cultures reveal Staph. aureus.

11. Prophylactic antibiotic therapy should be withheld until it becomes necessary to avert an epidemic. In this hospital it is the policy to institute antibiotic therapy on all infants in the nursery whenever two or more of this group develop clinical evidence of staphylococcal infection. Sensitivity studies of the responsible organism determine the choice of antibiotic. Therapy is continued in that area for 10 to 14 days after the last lesion has cleared.

12. Postponement of elective operations, such as circumcisions, should be recommended if there are infected infants in the nursery.

13. Every effort should be made to discover any infections which may appear after the infants' discharge. The mothers should be told to get in contact with the physician immediately if the newborn develops any evidence of infection.

The active treatment of the individual child with pyoderma or mastitis depends largely on the age and general health of the patient as well as the type of lesion.

The patient with pyoderma in the nursery or home must be followed carefully. The lesion should be cultured and sensitivity and typing studies performed on all coagulase-positive staphylococci. Local therapy consisting of bathing the infant with a hexachlorophene solution and application of an ointment containing neomycin and bacitracin to the involved area is helpful. If the child is less than 1 year of age, an oral antibiotic should be used. In the older child the use of local heat and incision of the larger lesions often are sufficient. If the boils are deep, antibiotics may be given for a few days before incision. These patients should be followed for long periods after the initial infection in order to detect complications or recurrences. If the lesions persist unusually long or reappear several times, a careful investigation for family carriers is necessay.

Infants with mastitis respond to warm packs to the breast, systemic antibiotics, and drainage. Care must be taken to avoid incisions which later may cause scarring and malformation of the areola and nipple in the female infant. Upon incision these abscesses drain copious amounts of purulent material. It is usually not necessary to leave a drain in place, and reaccumulations rarely take place. The antibiotic is continued for 7 to 14 days.

SUMMARY

The incidence of skin infections, especially in the newborn nursery, frequently reflects the staphylococcal climate of the whole area. It is of utmost importance that the physician be aware of the serious implication of the appearance of such lesions as it often portends death, an epidemic, and surely an increased morbidity among hospital patients. We believe that in the infant even the mildest Staph. aureus infection necessitates antibiotic therapy. Older, otherwise healthy children, may require no more than local treatment. Continued close observation always is essential.

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Pamphlet Gives Hope to Stroke Victims

Encouragement is given stroke victims in the pamphlet, "Good News for Stroke Victims," released by the Public Affairs Committee, a nonprofit educational organization, and written by Elizabeth Ogg. The pamphlet points out that the chances for overcoming the effects of a stroke are much greater today than they were four or five years ago. It describes the various types of strokes, including the type that recently affected the President of the United States, which is the kind that most readily yields to treatment and control.

The booklet is obtainable for 25 cents from the committee, 22 East 38th Street, New York 16.

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Fig. 1. Typical nasal lesions caused by staphylococcus.

Fig. 2. Superficial localized lesion.

Fig. 3. Deep lesion with wide induration and erythema.

Fig. 4. Lesion showing typical necrosis, 7 days after onset.

Fig. 5. Defect following slough.

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Staphylococcal Furuncles in Hospital Personnel

Control and Treatment

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THE EMERGENCE of antibiotic resistant forms of staphylococci has created one of the most important problems yet encountered by hospitals the world over. In the beginning resistant staphylococci were almost solely confined to hospitals, hence the designation "hospital strains of antibiotic resistant staphylococci." Furthermore, the resulting infections were termed "hospital acquired infections." This implied that the "hospital acquired infections" were a reflection of the hospital environment. With this background it became increasingly evident that the hospital would have to assume responsibility for "hospital acquired infections" and take measures to prevent and control the outbreaks of these infections, which have become prevalent. The institution of rigid control measures in dealing with these infections is imperative. For uniform rigid controls to be most effective requires the complete cooperation of the staff, the hospital administration, and all personnel. To meet these demands at the University of Texas Medical Branch, the Infectious Disease Control Program was inaugurated. A special unit was opened where all patients and personnel with infections due to resistant staphylococci are treated. The purpose of this paper is to describe the types of lesions encountered in this special unit, and to outline the measures which are taken to prevent and control outbreaks of resistant staphylococcal infections.

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The many contacts between hospital personnel and patients make it important for staphylococcal disease in personnel to be controlled. Familiarity with appearance of skin lesions produced by antibiotic resistant staphylococcus simplifies identification. Treatment consists of local heat, rest, and elevation, with incision and drainage if necessary and antibiotics in selected cases. Isolation is important.

MEDICAL BRANCH PROBLEMS

The Medical Branch, because of its size and nature, has specific inherent problems in its relation to staphylococcal infections. First of all, a large percentage of the patients admitted to the Medical Branch hospitals and clinics previously have been in other hospitals. These patients sometimes have frank infections when admitted. Also, a number of the previously hospitalized patients become nasal carriers before they reach this institution. This problem has become so important that all patients admitted to the Medical Branch Hospitals who have been hospitalized anywhere during the past year are required to have nasal cultures as a part of the routine admission laboratory work. This applies to all patients, both private and charity.

Secondly, at the Medical Branch there is an exceedingly great number of contacts between patients and personnel. This is in part because there are some 600 medical students on the campus, several hundred other types of students, such as student nurses and laboratory and x-ray technicians. Because of the size of the Medical Branch and its patient load, the number of regular personnel such as graduate nurses, licensed vocational nurses, nurses' aides, ward clerks, orderlies, and maids is very large, compared to most general hospitals.

DESCRIPTION OF LESIONS

Seen in the Infectious Disease Clinic are all staff personnel, house staff including interns and residents, medical students, nursing students, graduate nurses, and all other personnel at the Medical Branch who develop infections, particularly skin infections which possibly could be due to staphylococci. Nasal carriers among all Medical Branch personnel are also treated and followed in this clinic; however, in this paper, we will limit our discussion only to the infectious lesions.

Since the Infectious Disease Clinic opened in March, 1958, a total of 61 patients have been treated. The lesions occurred in all classes of personnel (table 1). It is interesting to note that 40 of the 61 patients were professional personnel, that is, staff, interns or residents, medical students, or nurses.

TABLE 1.—*Distribution of Staphylococcal Lesions Among Different Classes of Hospital Personnel.*

Staff members	3
Residents and interns	10
Medical students	11
Nurses (graduate, student, L.V.N.)	16
Nonprofessional personnel	21
Total	61

The appearance of the skin lesions produced by antibiotic resistant Staphylococcus aureus phage types 44A, 80/81 is so characteristic that it deserves special consideration. If one becomes familiar with these cutaneous lesions, the lesions may be recognized immediately and the proper management and control carried out without the delay due to awaiting culture and sensitivity reports. It is believed that early recognition and early treatment are essential to the control and prevention of outbreaks of the infection in the hospital.

Staphylococcic 44A, 80/81 furuncles are the most common type of lesions seen in the clinic. These furuncles may occur at any site on the body, but the most common sites are the exposed surfaces such as the face and extremities. Protected areas, that is, covered areas such as the gluteal region, the perineum, and the trunk, are also fairly common sites. It is believed that furuncles developing in these protected areas are the result of transmission by the hands, and possibly those on the perineum from organisms in the gastrointestinal tract. It should be pointed out that a common site for lesions of the face is inside the nose. Lesions about the face, and particularly about the nose and upper lip, are considered important surgical lesions and require early appropriate antibiotic therapy regardless of the severity of the lesion.

The staphylococcus 44A, 80/81 furuncle is characterized by the following:

1. Extreme pain locally which is out of proportion to the gross appearance of the lesion is present.

2. A zone of erythema and induration is present and varies in extent depending upon whether the lesion is superficial or deep. The superficial lesions are more localized and limited than the deeper lesions.

3. A zone of tissue necrosis without early liquefaction eventually occurs. The common staphylococcal furuncle liquefies early and evacuation can be carried out within 2 or 3 days usually. In contrast, the 44A, 80/81 lesions liquefy very slowly, and incision and drainage may have to be postponed for a week or longer. Frequently the lesions do not liquefy, and the necrotic area sloughs away in 7 to 10 days leaving a large defect.

4. The regional nodes are commonly involved.

It may be mentioned that recently we have observed that some of the lesions have changed their original character in that localization and liquefaction are occurring more rapidly than before. The reasons for this apparent change may be attentuation of the virulence of the organisms or the development of immunity on the part of the patients, or both.

Several colored photographs portray the characteristics of these lesions very well (fig. 1-5).

All lesions are cultured and sensitivity patterns obtained. The sensitivity pattern characteristically shows resistance to penicillin, tetracycline, and erythromycin. This is the so-called triple resistance pattern frequently observed in 44A, 80/81 infections. Sensitivity patterns of the coagulase positive staphylococci occurring in individual hospitals are important to know since the 44A, 80/81 infections may be identified by the sensitivity pattern before a culture can be obtained. At the Medical Branch, rapid sensitivity patterns can be obtained within 12 to 24 hours. In this institution the 44A, 80/81 organisms have been sensitive to novobiocin, Chloromycetin, spontin, oleandomycin, kanamycin, neomycin, polymixin, and bacitracin. These antibiotics should be used for specific infections in order to prevent the emergence of resistant strains to these antibiotics. Another observation made in the clinic is the appearance of 44A, 80/81 organisms which are sensitive to all antibiotics, including penicillin. An explanation for this apparent change is not offered.

GENERAL CONTROL MEASURES

The Infectious Disease Control Clinic consists of a waiting room and a treatment room, where all ambulatory personnel having infected lesions are seen. This clinic is used for no other patients and is considered an isolation area. All examinations and treatments are carried out under isolation technique, and the clinic area is thoroughly cleansed after the day's use.

Many lesions not due to resistant staphylococcus are seen, but this is necessary in order to find the resistant staphylococcus cases so they can be isolated and treated.

Necessary epidemiological data are taken on each case so we can determine where and why the infection was contracted. By reviewing these data, certain

"hot spots" in the institution can be found and necessary corrective measures undertaken.

Ambulatory patients are relieved of duty in the hospital while their lesions are active. They are followed in the Infectious Disease Control Clinic until the lesion is healed and no drainage is present, and then they are allowed to return to work. Removal of these employees from their jobs temporarily causes much inconvenience, but such action is mandatory if the infection is to be controlled.

For hospital patients with active resistant staphylococcal infections, an isolation ward was established so that infected cases could be separated from the "clean cases." These patients are kept in isolation until the lesion is well, and then they are allowed to return to their original hospital area.

As an additional general control measure, all personnel are instructed as to the proper technique of hand washing after each patient contact. Personnel with active lesions are instructed to bathe with a hexachlorophene-containing soap. They are also instructed as to the proper method of disposing of soiled bandages, towels, and bed linen at home, so as to minimize spread of their infection to other members of the household. Any draining lesion is kept covered at all times.

SPECIFIC TREATMENT OF LESIONS

The treatment of all ambulatory patients needing surgical care has been done by the authors since the Infectious Disease Control Clinic was started. The specific treatment of these lesions is somewhat different from the treatment of "ordinary" boils, carbuncles, and cellulitis, chiefly since the lesions caused by resistant staphylococcus are more virulent, produce a more severe local reaction, have a more protracted course, and produce systemic manifestations more often.

The lesions are treated with local heat, rest, and elevation. When fluctuation occurs, they are incised and drained. In those lesions which are incised and drained, there is often a "core" of necrotic material which must be removed with tissue forceps before adequate drainage will result. It has been our experience that most of these lesions eventually localize and need incision or will drain spontaneously. All lesions are covered with a bandage at all times so as to minimize contamination. The patient is advised to keep his hands off the area as much as possible and to wash his hands thoroughly after each dressing or application of moist heat.

Early in our experience we were confronted with the problem of whether or not to employ antibiotics. In an attempt to solve this problem, the following criteria were used as indications for antibiotics:

1. All lesions on the nose, face, and scalp.
2. Lesions associated with tender regional adenopathy.
3. Lesions associated with systemic symptoms such as chills, fever, and malaise.
4. Lesions which exhibit a wide area of cellulitis.
5. Multiple simultaneous lesions.
6. Carbuncles.
7. Patients with other diseases, particularly diabetes mellitus.

Patients with lesions not falling into one of the seven categories are not given antibiotic therapy.

The lesions which need antibiotic therapy are usually severe enough to deem it unwise to await the results of sensitivity studies before beginning treatment. In such cases, novobiocin in doses of 250 mg. orally every 6 hours is used. So far, all of the lesions which have been treated have had organisms sensitive to novobiocin. If the organism is a resistant staphylococcus, treatment with novobiocin is continued; however, if the organism is not a resistant staphylococcus, the appropriate antibiotic is substituted, as indicated by the sensitivity studies.

Patients with positive nasal cultures are treated with local nonsystemic nasal ointment or spray until the nasal culture is negative.

RESULTS

Because of the enforcement of the general control measures, the number of infections has decreased markedly in the past 6 months. Figure 6 illustrates

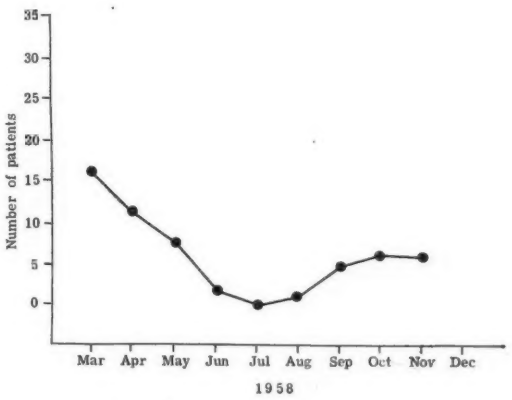

Fig. 6. Graph showing the results of control measures instituted at the University of Texas Medical Branch against staphylococcal infections in hospital personnel.

the decrease in the number of infections following the institution of control measures. Ambulatory patients with active lesions have cooperated well in coming for treatment early, and energetic treatment has resulted in prompt control of the infection. Only 1 patient was sick enough to be hospitalized.

It is interesting to note that there have been only 2 resistant staphylococcus infections developing in personnel who work daily in the Infectious Disease Control Clinic and in the hospital isolation unit. This fact shows the importance of isolation technique in controlling this infection.

SUMMARY

The problem of skin lesions produced by antibiotic resistant forms of staphylococci in the personnel at the University of Texas Medical Branch is discussed. The characteristics of these lesions are described. The general control measures which have been used at the Medical Branch are enumerated, along with the specific methods of treatment. The results obtained by this program have been good.

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Drug Label Warnings Compiled

The Food and Drug Administration has published a compilation of label warning statements for guidance of drug manufacturers in devising labels which meet the requirements of the Federal Food, Drug and Cosmetic Act. The act requires labels of drugs and medical devices sold without prescription to bear "such adequate warnings . . . as are necessary for the protection of users."

The compilation includes more than 100 suggested warnings for an extensive list of drugs, including those for animal use, and several therapeutic devices.

One-Third New Doctors Yearly Train in VA Hospitals

About one-third of the 7,000 new physicians being produced by the United States yearly receive training in Veterans Administration hospitals.

During 1958, in cooperation with colleges and universities, VA hospitals had in training 6,000 medical students; 2,500 physicians becoming specialists as residents in psychiatry, general surgery, internal medicine, and 16 other fields; 70 dental interns and residents; 2,900 student nurses; 700 psychology trainees; 281 occupational therapy trainees; 329 social work trainees; 85 dietetic interns; and some 100 trainees in medical administration, pharmacy, audiology, speech correction, and similar medically-related specialties.

Control of Carriers of Staphylococci

Specific Recommendations

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THE CONTROL of the staphylococcal carrier presents many vexing problems. For example, what is a carrier? How does one recognize such an individual? How frequently does the carrier state occur? How long does it exist? What is its tendency to recur should it disappear? Is there any practical method of management? Or is any management required? Does the demonstration by culture of a phage type coagulase positive staphylococcus necessarily mean pathogenicity?

These represent some of the questions that we at the University of Texas Medical Branch and others have attempted to answer in the control of staphylococcal outbreaks in our hospitals. In spite of a bibliography of more than 500 articles in the medical literature regarding staphylococcal disease, there is no unanimity of opinion regarding the answers to these questions. There is general agreement, however, that the nasal passages are one of the more common areas of the body which harbor pathogenic staphylococci. By this statement, it is not meant to imply that there are not other areas of the body harboring these organisms, for example, skin or gastrointestinal tract, and there is evidence to indicate that in some few carriers the nose is not involved at all.[3] Nevertheless, the nasal passages present a particular and unique problem. They are not accessible to ordinary methods of cleanliness; they cannot be effectively covered for long periods of time without inconvenience, embarrassment, and expense; they are in an optimum location for dissemination of the organism to others and to one's skin and clothing, and in addition, many habitually and unconsciously rub or manipulate the nose with their hands. If this latter statement is challenged, observe

a group of people carefully and notice how often the nose is touched or handled.

Although we have had sporadic cases of serious staphylococcal infections of obscure origin in our patients and among our students and personnel, every outbreak of serious staphylococcal disease in our nursery was traced to a nasal carrier working in that

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Nasal carriers are an important source of staphylococcal contagion. At the University of Texas Medical Branch a control program has included screening nasal cultures to detect carriers, application of antibiotic ointments or sprays to the nose, instructions regarding personal hygiene and aseptic technique, and exclusion from duty of persons with open skin lesions.

area. Also, we have observed several infections arising in students' or personnel's households where the only reasonable source of contact was a known nasal carrier. For these reasons, we believe that the nasal carrier is a very important source of staphylococcal contagion.

IDENTIFICATION OF CARRIERS

Since it was our conviction that nasal carriers were important in the transmission of this disease, we sought methods for their control. First it was necessary to identify nasal carriers. This was accomplished by a survey nasal culture of all personnel, patients, and students. From this study,[1] we were able to recognize the degree of our problem and the areas where screening and control measures were likely to be profitable. It is now our policy to take nasal cultures from all persons before assigning them to the nursery, obstetrical unit, pediatric service, and operating suites. We are also obtaining weekly cultures on persons working in these areas. Periodic surveys are done in areas where unexplained outbreaks of staphylococcal disease occurs. And, an effort is being made to obtain nasal cultures on hospital admitted patients who are from other hospitals or who have been treated recently with antibiotics.

All nasal cultures are studied by the Department of Bacteriology for the presence or absence of staphylococci, and all staphylococci are tested for coagulase activity and antibiotic sensitivity against 10 different antibiotics (penicillin, tetracycline, erythromycin, novobiocin, chloramphenicol, bacitracin, oleandomycin, ristocetin, and kanamycin) and are phage typed. Only those persons with phage type 81 and other coagulase positive staphylococci resistant to two or more antibiotics are considered "carriers," since these particular organisms are the ones responsible for the nursery outbreaks and more serious staphylococcal disease in our hospital.

In situations where phage typing is not available, it may be best to consider all individuals with coagulase positive staphylococci in the nose as "carriers." But, if this is done, it will increase the number of "carriers" considerably. For example, nasal cultures taken in September, 1958, from 121 freshman medical students revealed 55 per cent with no staphylococci, 36 per cent with coagulase positive staphylococci, and 9 per cent with coagulase negative staphylococci. Only 5 had a phage type 81 organism isolated, and there were no other antibiotic resistant staphylococci detected. Of these latter 5 students, 4 had summer employment in hospitals. Contrast this experience with an analysis of 1,439 nose culture results from 490 of our nursing and medical students including the freshman group where 46 per cent of the cultures had coagulase positive organisms and of the total group 19 per cent were carriers of phage type 81 and another 4 per cent had other antibiotic resistant coagulase positive staphylococci. These findings indicate that the number of coagulase positive student carriers does not increase tremendously, but that the number of persons with antibiotic resistant organisms in their nose increases in a hospital environment.

The determination of the antibiotic sensitivity pattern of coagulase positive staphylococci may be the simplest method for the recognition of the more dangerous strains. Such sensitivity studies can be carried out in any clinical laboratory. However, it should be appreciated that some of the worrisome phage type staphylococci are not consistent in their antibiotic sensitivity patterns and on occasions a carrier will be missed by the use of this method.

METHOD OF CONTROL

Once we detected our nasal carrier group, we were in a position to explore methods of control. One obvious method would be the use of masks. After considerable debate, it was decided to discard this

as a routine control measure for several reasons. First, it seemed impractical for every person with a positive culture to wear a face mask while he carried out his duties. Aside from the obvious embarrassing identification of the carrier, there is the notorious unwillingness of persons to wear a mask over the nose. Second, there is evidence[4] that unless a mask is changed frequently or is of unusual thickness, it becomes loaded with nasal organisms and is more infective than direct air from the nares. For use in the nursery and on the infectious disease wards, we have provided disposable paper masks which are discarded after each patient contact. Also, we urged the carriers to use these masks when they were working with the seriously ill or debilitated patient. The traditional cloth masks are used in the operating suites.

The frequency of the carrier state was of such magnitude that it would have been impossible to maintain classes, much less the necessary personnel for the operation of a hospital, and prohibit the carrier from patient contact. For instance, 112 medical and nursing students, out of a total student population of 828, have had on one or more occasions a positive nose culture for phage type 81 or other antibiotic resistant staphylococci. This represents an incidence of 13 per cent or 1 of every 8 students and ignores other coagulase positive carriers. A similar frequency of carriers has been observed among hospital personnel employed in patient care. Here, simple exclusion of nasal carriers as a control measure would have made maintenance of hospital wards impossible.

Eventually, the following program of control evolved. Upon detection, the nasal carrier was placed under surveillance in a special clinic which was established for this problem. All persons were given a printed instruction sheet which attempted to explain in simple language the reason for their being in the clinic, the importance of personal hygiene, clean clothing, frequent hand washing, and the need for special precautions with debilitated patients or patients with recent surgical wounds. Nasal carriers were absolutely precluded from the nursery and the delivery rooms. We have assumed that the application of an antibiotic ointment or spray to the anterior nares would decrease the population of staphylococci in the nose. Therefore, each carrier was issued a container of a water soluble, nonoily ointment or spray containing antibiotics that are rarely used systemically or that are nonabsorbable, that is, neomycin, bacitracin, and polymyxin. Instructions were given to apply the preparation to the anterior nasal passages frequently while on duty. At the end of 5 days, the therapy was stopped. A second culture was obtained on the seventh day. Then the treatment was resumed and the process repeated until two consecutive negative cultures were obtained. After two negative cultures were reported, the carrier was considered cleared but was advised to return for a follow-up culture within a month. All persons with any skin infection were instructed not to work and to report immediately to the clinic for management of the lesion.

Systemic sensitization reactions have not been observed from the use of these topical antibiotic ointments or sprays. In some instances, these preparations did cause rhinorrhea and irritation to the anterior nares. This was controlled by changing preparations or bases in all instances except 2. Also, most strains of coagulase positive staphylococci have remained sensitive to the antibiotics in the preparations.

Table 1 summarizes our experiences with 112 nursing and medical student nasal carriers in regard to the number of positive cultures obtained for phage type 81 and other antibiotic resistant staphylococci and the frequency of suppurative skin lesions.

An attempt was made with every person who had a positive culture on one occasion to have a minimum of two follow-up cultures at weekly intervals. This was not always possible because of holidays, the preceptorship program, the termination of cours-

TABLE 1.—*Number of Positive Cultures for Phage 81 and Other Antibiotic Resistant Staphylococci and Frequency of Suppurative Skin Lesions Among 112 Nursing and Medical Student Nasal Carriers.*

No. Times Culture Positive	No. Students	No. with Skin Lesions
1	58	7
2	25	4
3	11	3
4	5	4
5	5	2
6	1	0
7	0	0
8	3	1
9	2	1
10 or more	2	1

TABLE 2.—*Follow-Up Studies on 112 Student Carriers of Antibiotic Resistant Staphylococci.*

83 (74%)	were free of the carrier state within 1 month. Of this group:
44 (39%)	have not been followed for 2 months
28 (25%)	were followed 2 months and longer and remained clear
11 (10%)	had a second positive culture at another interval greater than 2 months
6 (5%)	were free of the carrier state within 2 months, and of this group:
1	followed 3 months remained free
23 (20%)	remained positive for 2 months and all have had a positive culture at some later date.

es, and lack of cooperation. An analysis of our follow-up studies on the 112 student carriers is recorded in table 2.

Our experience with nasal carriers is similar to that reported by others[2] and indicates that many persons are "occasional carriers" yet lose the organisms rapidly. It is believed that such persons pick up staphylococci from recently inspired air and that the organisms (for unknown reasons) do not colonize the nose. Other individuals classified as "transient or intermittent carriers" maintain a positive culture on two or three occasions but soon lose the organism perhaps to acquire it again at a subsequent time. A small group of persons have persistently positive cultures. These "persistent carriers" represent the most difficult control problem, and at the moment no satisfactory method of handling them has been devised. We have explored other topical antibiotic preparations, systemic antibiotics, autogenous vaccines, and toxoids with occasional success, but our experience is too limited to make any specific recommendations at this time.

It might be argued that a large percentage of transient carriers will become negative if no specific therapy is given. Lepper, Jackson, and Dowling[5] found that 62.2 per cent of a group of coagulase positive staphylococcal carriers did not have the same strain of organism present at the end of 1 month, but after the first month the "rate of change or loss" was 1.3 per cent per month. Our findings suggest that the "rate of change" has been improved, that is, 74 per cent were cleared at the end of 1 month, 79 per cent were cleared at the end of 2 months. The word "cleared" refers specifically to phage type 81 and other antibiotic resistant staphylococci and not to all coagulase positive staphylococci isolated. We have justified the use of antibiotic ointments and sprays primarily for the control of the spread of infection and not as a treatment measure per se.

It was hoped that a simple method of recognition of the persistent nasal carrier would be the tendency to develop frequent and recurrent skin lesions. In our experience, this is not a reliable guide. For example, we have observed that 18 of 99 students with positive nasal cultures on less than 4 occasions had boils. Only 5 of 13 students with positive nasal cultures on more than 4 occasions had boils. Of our 23 persistent carriers (cultures positive longer than 2 months) only 7 have had recurrent boils. To complicate the problem further, we have observed 16 students with boils in whom repeated nose cultures have failed to demonstrate a staphylococcus of the same phage type as that producing the boil. Eight of these boils were due to phage 81 or other antibiotic resistant coagulase positive staphylococci. We have interpreted these infections as being occupationally acquired, though some of these individuals may represent skin or fecal carriers.

Although the person with a suppurative skin lesion is not necessarily a carrier, we exclude such persons from duty until the lesion heals on the principle that a person with a communicable disease should be isolated from a susceptible population. Unfortunately, in our experience, keeping an antibiotic spray or ointment in the nose was not effective in preventing repeated skin infections although it is possible that more nasal carriers might have developed skin lesions had the positive nose culture been ignored.

At the present time, the carrier control program in our student population is handled by a 30 minute clinic three times a week. There are approximately 20 students (2.5 per cent of total student group) under surveillance. This number varies periodically, but once a program is established it has not been a particularly time consuming chore to maintain it.

The program we have followed has been expensive and has required the services of a physician and trained bacteriological technicians. Yet, there seems no simpler method if one believes that nasal carriers are important in the spread of staphylococcal disease. Our experience as well as that of others has convinced us that they are.

For the smaller hospital, a complete bacteriological study may not be feasible. At the same time the number of persons involved is proportionally less and the problems of control should be easier. Certainly, the number of complicated patients funneled from other institutions who have had multiple antibiotic therapies should be fewer than in the large teaching hospital.

Since the physician, as much as any one individual, is in a position to acquire and carry organisms from one patient to another, he should evaluate critically his own personal hygiene, his aseptic technique, and if possible, determine the culture pattern of his nasal flora. He should be particularly suspicious that he may be a staphylococcal carrier if he is bothered with recurrent skin infections. Lastly, he should remember that much of good hospital practice is taught by preceptorship and that no one is in a better position to set an example than the doctor himself.

SUMMARY

A program of control of the staphylococcal nasal carrier has been detailed as it was evolved in our hospital. In general, the program has consisted of screening nasal cultures to detect carriers, the topical application of antibiotic ointments or sprays to the nose to reduce the dissemination of the pathogenic staphylococci, instructions regarding personal hygiene

and aseptic technique, and the exclusion from duty of those persons with open skin lesions.

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Importance of Antibiotic Resistant Staphylococcal Infections to the Obstetrician

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TO OBSTETRICIANS the seriousness of staphylococcal infections in hospitals in recent years is an old story, except that now other areas of the hospital are also involved. This is merely another form of the "puerperal fever" which scourged maternity areas for many years. The only difference is that this time, instead of the streptococcus being the infectious agent, it is now Staphylococcus aureus. The obstetricians must consider this a form of puerperal fever because of such symptoms as bacteremia, pneumonia, and peritonitis, as well as the more common symptoms such as infected episiotomies, pustules, and breast abscesses. The outbreaks of these infections due to antibiotic resistant organisms has caused great concern among many physicians and nurses because for the first time in their careers they have not had a suitable drug with which to treat these infections. This is primarily so because approximately 50 to 60 per cent of the practicing physicians and nurses have attended school and been graduated after the advent of the sulfonamides and antibiotics and therefore do not realize the seriousness of the problems concerned in controlling infections as do our older physicians of the preantibiotic days. Many of our younger physicians have fallen into many bad habits; a few examples could be routine vaginal examinations instead of rectal examinations during labor, improper surgical scrub techniques prior to accouchement or surgery, and invading the vagina immediately after delivery for purposes of doing a manual removal of the placenta rather than wait for spontaneous separation and expulsion. Having committed these errors in procedures, they then depended upon the so-called prophylactic antibiotics to prevent infection. We as teachers either have forgotten to teach the students or the students have failed to learn the basic principles of an obstetrical or surgical service or how to prevent infections. Proper techniques and procedures were developed after many years of combating puerperal infections on maternity services. It is probably best that we review some of the historical literature of puerperal infections in discussing problems in the maternity area.

PUERPERAL FEVER

Ignaz Philipp Semmelweis, because of his writing in 1847, is generally given credit for establishing the principles of cleanliness and sterilization necessary to prevent puerperal fever. These principles were established by Alexander Gordon, M.D. in a "Treatise on the Epidemic Puerperal Fever"[1] in 1795. In this treatise he first described the infection and methods of transmission and made recommendations for the prevention of the disease. It would be remiss in a discussion of the infections on a maternity service not to reprint some of the statements of Dr. Gordon from his experiences in the late 1700's:

> That the cause of this disease was a specific contagion, or infection, I have unquestionable proof.
>
> When the puerperal fever is frequent and fatal, that is, when it prevails as an epidemic, its cause has been referred to as noxious constitution of the atmosphere.
>
> But that the cause of the epidemic puerperal fever under consideration was not owing to a noxious constitution of the atmosphere, I have sufficient evidence; for if it had been owing to the cause, it would have seized women in a more promiscuous and indiscriminate manner. But this disease seized such women only as were visited or delivered by a practitioner, or taken care of by a nurse, who had previously attended patients affected with the disease.
>
> In short, I have evident proofs of its infectious nature, and that the infection was as readily communicated as that

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The seriousness of staphylococcal infections today reminds obstetricians of the "puerperal fever" which Semmelweis wrote about in 1847 and Gordon in 1795. The same principles of isolation, cleanliness, and other efforts to prevent infection which were followed before the days of antibiotics must be reemphasized.

of the small pox or measles, and operated more speedily than any other infection with which I am acquainted.

This description almost could be carried over to the present problem of staphylococcal infections on maternity-newborn service. When it first appeared in our maternity-newborn area as breast abscesses and pustules in newborn infants and breast abscesses in mothers, members of the obstetrical and pediatric service recommended many changes in procedures and facilities in order to prevent their occurrences. We were ignored and ridiculed much as Dr. Gordon was when he first made the statement quoted. It was thought that for the large part these infections were hand borne, as well as from nasal droplets. This is similar to the thinking of Dr. Gordon when he stated:

> The midwives from Aberdeen carried the infection to the Printfield, or great cottonworks, two miles from town, where a great number of lying-in women was affected; while at the same time the women in the neighbourhood who were delivered by country midwives escaped.
>
> The infection was carried, by practitioners of midwifery, from Aberdeen to Gilcomston and the Hardgate, villages in the suburbs of the city; while women in the adjacent country, who were delivered by country midwives on the spot, escaped.

He went on to describe practically the entire ideology of Semmelweis when he wrote

> and if in the dissection of a putrid body, a surgeon scratched his finger, the part festers, that is, inflames and suppurates; and if a fever should be the consequence, it is inflammatory in the beginning, and only ultimately putrid. And further, if such a fever be properly treated in the beginning it never becomes putrid at all.
>
> In like manner, if putrid matter be applied to the uterus, it inflames that organ and the contiguous viscera; that is, it gives rise to the puerperal fever, which is ushered in with a cold state, and succeeded by a very rapid pulse and acute pain in the abdomen.

From such men as Gordon, Semmelweis, and Pasteur, principles for the cause and prevention of puerperal fever have been established; from Fleming and the antibiotics, a cure. The indiscriminate use of sulfonamides and antibiotics substituted for the principles of cleanliness and precaution by our modern physician has left us with the problem of the resistant strains of staphylococcus in hospitals as well as the possibility of other resistant organisms such as streptococcus that may develop in the future. There are many who will ask, "What has all this to do with our present day problem?" The answer to this is that we need to go back to the previous experiences of others to reorganize our thinking and begin to educate and practice the art of medicine in such a way as to prevent these infections. We must seek out and teach the medical ostrich (the physician, nurse, or administrator who has his head buried in the sand) to recognize the seriousness of the situation today and to take steps to correct the errors that exist.

SOLVING THE PROBLEM

On the maternity-newborn service we must go back to the tried and true principles which are contained in all publications of state and national health agencies, as well as pediatric and obstetrical organizations, on policies to be followed in these areas.

It is a well established fact that maternity divisions should be isolated from the rest of the hospital, either on a separate floor where there is no outside or through traffic, or in an isolated wing of the hospital. This has not been done in many modern general and teaching hospitals. When these problems are brought to the attention of the administrative officials and hospital boards, the physicians are frequently ridiculed and their advice is ignored. Maternity patients must be isolated from other patients, and even though the hospital administrator may want to assign other types of patients to beds not in use in maternity units, he must be denied this privilege. Every mother and infant must be removed from the obstetrical or newborn nursery area as soon as an infection is suspected. Infants born outside the obstetrical service should not be admitted to the newborn nursery, and the mother of these infants should not be admitted to the obstetrical service. Visiting hours on the obstetrical service must be curtailed and controlled. The popular idea of attempting to simulate in a hospital the atmosphere of the home by allowing members of the family to be in the labor and delivery rooms and to be with the infants must be denied unless special facilities are provided for this type of special care. This is not provided in the average general or maternity hospital.

Careful attention must be given to proper ventilation, such as heating and cooling, so that contaminated air is not circulated through hospital rooms and wards. This has become a serious problem in

modern hospital construction with air conditioning and circulated hot air. Careful cleaning and sterilization of blankets, linens, matresses, pillows, dishes, bed pans, and so forth must be done after use by one patient and before use again. It has been ably demonstrated that these resistant organisms can be isolated from these many areas.

Hospital help, such as orderlies, maids, and janitors, must be educated regarding methods of sterilization and prevention of contamination. We must educate our nurses and doctors as to proper procedures, such as used in the preantibiotic days to prevent infections and insist that these principles be followed. The importance of proper hand scrubbing between examination of patients, the importance of not wearing scrub suits outside the delivery or operating rooms, and the dangers of vaginal examination during labor all must be emphasized. We must teach our medical and nursing students the importance of the prevention of infections, as well as acceptable methods of treatment. The dangers incumbent in using antibiotics when not indicated cannot be stressed too much. We must stop the use of prophylactic antibiotics as well as injudicious use of antibiotics.

Resistant staphylococci in obstetrical patients have been cultured from the cervix, breast abscesses in nursing and non-nursing mothers, and those with pneumonia, bacteremia, boils, episiotomies, and abdominal wounds following cesarean sections.

The problems must be faced realistically, and we must practice the basic principles in prevention of infections. By so doing we may prevent the disasters which have occurred in many hospitals during the last few years. This is particularly true for the obstetrician as he is working with the mother and infant who are extremely susceptible to these infections. We who practice preventive medicine daily in giving prenatal care should now be the leaders in emphasizing preventive medicine in our hospitals.

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Osteoarthritis Booklet Available

"Osteoarthritis—A Handbook for Patients" is the title of a new booklet published by the Arthritis and Rheumatism Foundation, 10 Columbus Circle, New York 19. Osteoarthritis, which affects more than one-half of the over-50 population, is currently in the national news because its victims include the new American Secretary of State, Christian A. Herter.

Staphylococcal Pneumonia and Empyema in Infants and Children

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Staphylococcal pneumonia should be kept in mind, especially in infancy where it is more likely to occur and to progress to empyema, pyopneumothorax, and death. With pyopneumothorax, surgery as well as antibiotic therapy is demanded. Among 19 infants and children treated for staphylococcal pulmonary disease, almost one-third died.

PNEUMONIA ranks among the more serious forms of staphylococcal infection. Although no age group is exempt, debilitated hospitalized patients and infants in the first year of life are most likely to develop pulmonary infections due to hemolytic, coagulase positive, Staphylococcus aureus. In a series of 19 infants and children diagnosed with staphylococcal pneumonia and/or empyema at the University of Texas Medical Branch Hospitals between 1953 and 1958, 16 were less than 6 months of age. In the infant staphylococcal pneumonia is more apt to develop as a primary disease whereas among older age groups it occurs more frequently as a complication of other conditions such as fibrocystic disease of the pancreas and debilitated states. The development of empyema in 13 of the 19 infants and children with a complicating pneumothorax in 12 emphasizes the severity of the condition. The rapidly accumulating literature on this subject in recent months attests to the increasing incidence of staphylococcal pneumonia as a significant problem.[1-4, 6-9]

INCIDENCE

The exact frequency with which this condition occurs is difficult to ascertain since positive diagnosis is dependent upon bacteriological identification of the organism from pleural fluid or lung tissue. Although pathogenic staphylococci may occur in the nasopharynx without clinical evidence of disease, in certain selected groups, such as infants with bronchopneumonia, a positive laryngeal, oropharyngeal, or nasopharyngeal culture offers presumptive evidence for the diagnosis of staphylococcal pneumonia. By means of cultures obtained from lung puncture Disney[2] studied 88 cases of bacterial pneumonia among hospitalized infants under 2 years of age and found that 35, or more than one-third of the cases, were due to staphylococci. Smith[7] stated that in nearly 50 per cent of children under 2 years of age with radiographic evidence of pneumonia staphylococci are the offending organisms. Although these data exhibit some bias in that they are derived from hospitalized, hence the more seriously ill, patients, the importance of the staphylococcus as an etiologic agent in pneumonia of infancy is clearly evident.

The incidence of staphylococcal empyema is more easily documented, for the pleural fluid provides a ready culture source. Forbes and others[4] have observed that whereas staphylococci were responsible for only 3 to 12 per cent of the cases of empyema in children of the preantibiotic or early sulfonamide era, at the present time 50 per cent or more of such cases are of staphylococcal origin. Review of the hospital records at the University of Texas Medical Branch for a 6 year period showed no patients suffering with staphylococcal pneumonia or empyema during 1953 and 1954, and only 1 in 1955. Eighteen cases have occurred since 1956 coinciding with the recent surge of antibiotic resistant staphylococci as a hospital problem.

PATHOGENESIS

Extrapulmonary staphylococcal infections such as pyoderma, otitis media, and subcutaneous abscesses are likely to precede or accompany approximately one-third of the cases of staphylococcal pneumonia.[6, 7] The exact significance of the environment and the staphylococcal carrier state, although suspected as being highly significant, has not been completely evaluated. Characteristically, bronchopneumonia develops as areas of purulent necrotizing inflammation containing many thrombosed blood vessels in which masses of cocci are often seen microscopically. As the necrotic areas enlarge, sizable cavities may result. Rupture of a peripheral cavity carries the infection into the pleural space. If the ruptured abscess communicates with a bronchus, bronchopleural fistula complicates the empyema.

The predilection for staphylococcal pneumonia to occur in very young infants presents a challenging, but unsolved problem. Perhaps low concentrations of serum gamma globulin and complement as well as low circulating levels of staphylococcal antitoxin during the first few months of life[5] offer partial explanation for this phenomenon.

CLINICAL PICTURE

The often fulminating character of staphylococcal pneumonia is illustrated by the following case.

CASE 1.—A Negro girl was born at the University of Texas Medical Branch Hospitals on September 5, 1957. On September 30 she was taken to a physician because of rhinorrhea of 7 days' duration. Physical examination revealed a watery nasal discharge and seborrheic dermatitis

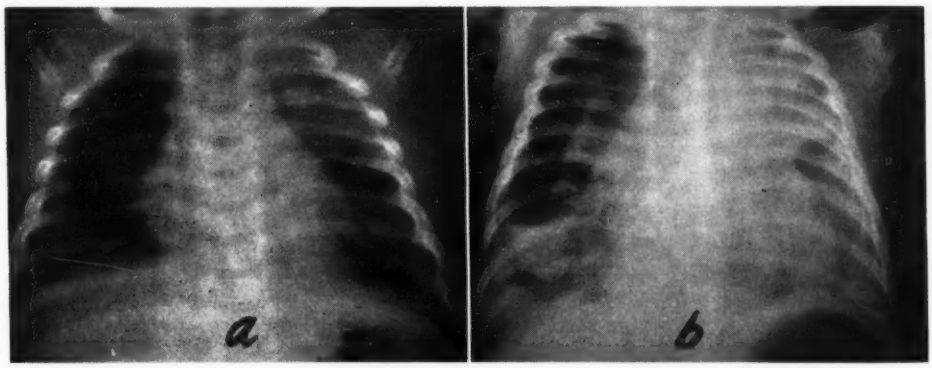

Fig. 1. Case 1. **a.** Roentgenogram of the chest at the time of hospital admission for bronchopneumonia of the left upper lobe.

b. Roentgenogram taken 28 hours after the initial film when the infant had developed right hydropneumothorax as well as massive consolidation of the left lung.

without evidence of superimposed bacterial infection. Neosynephrine nose drops were prescribed, and during the next 3 days the infant improved. On October 15, however, she became irritable, refused most of her feedings, and slept very little. The next day a temperature of 101 F., pulse of 160, and a respiratory rate of 80 per minute were observed. Seborrhea was noted on the face, neck, shoulders, and scalp. A mucopurulent nasal discharge, oral candidiasis, rales in the left chest posteriorly, and slight abdominal distention were also present. Roentgenogram of the chest (fig. 1a) upon admission to the Isolation Unit was reported as showing bronchopneumonia of the left upper lobe. Total leukocytes numbered 25,600 per cubic millimeter with segmented neutrophils 57 per cent, stabs 28 per cent, lymphocytes 2 per cent, and monocytes 13 per cent; hemoglobin was 11 Gm. per 100 cc.

Penicillin, tetracycline, and oxygen therapy were initiated after nasopharyngeal and blood cultures were obtained. Twenty-eight hours after admission the infant suddenly became cyanotic and respirations more labored. A repeat chest film (fig. 1b) revealed right hydropneumothorax. The consulting thoracic surgeon introduced a catheter through the chest wall and obtained a small amount of purulent material. By means of closed suction drainage the empyema fluid was removed and the lung expanded. Chloromycetin and erythromycin replaced the previous antibiotic therapy. Progressive abdominal distention was treated by continuous gastric suction. Despite these measures the infant died less than 3 days following admission. Staphylococcus aureus, coagulase positive, resistant to penicillin and tetracycline, was cultured from the nasopharynx, blood, and pleural fluid.

On postmortem examination the lungs were covered by a fibropurulent exudate and contained multiple abscesses. Microscopic sections of the spleen revealed numerous small abscesses with central clumps of bacteria.

The problems and inconsistencies concerned with the clinical picture of pneumonia in early infancy are well known and do not necessarily vary with the etiologic organism. Although fever and leukocytosis are characteristic, the infant of a few weeks of age, especially when gravely ill, may have a subnormal temperature and leukopenia. Physical signs of pulmonary consolidation or pleural effusion are usually present, but in a very small infant breath sounds may be heard quite well through an area of effusion. Even in the absence of classical physical findings of pneumonia, respiratory distress, abdominal distention, cyanosis, and prostration should suggest the diagnosis.

The often rapidly progressive radiographic picture is demonstrated by comparison of figures 1a and b. Development of pyopneumothorax while not diagnostic is strongly suggestive of staphylococcal pneumonia, particularly in an infant less than 6 months of age. Pulmonary pneumatoceles, thin walled cyst-like cavities within the pulmonary parenchyma, may develop late in the course of the disease and persist for months.

The prognosis in staphylococcal pneumonia is uniformly grave. An over-all mortality has been observed in 37 per cent[6] to 70 per cent[7] of the cases. Among the 19 cases seen at the University of Texas Medical Branch since 1955, 6 (31.6 per cent) of the patients died. Twelve of these 19 infants and children, of which several are being reported in detail elsewhere,[8] developed pyopneumothorax. Only in 1 instance did pleural effusion without lung collapse occur. Among the surviving infants with primary staphylococcal pneumonia periods of hospitalization extended from 23 to 81 days with an average of 48 days.

DIAGNOSIS

A presumptive diagnosis of staphylococcal pneumonia should be made on the basis of the clinical picture. Any infant less than 6 months of age and severely ill with pneumonia should be considered to have a staphylococcal infection until bacteriological evidence to the contrary is forthcoming. History of a recent extrapulmonary infection such as pyoderma or breast abscess due to pathogenic staphylococci is supportive evidence for staphylococcal pneumonia. Extrapulmonary staphylococcal infections preceded the development of pneumonia in 7 of our 19 infants and children. The physician also should be particularly alert to this possibility when staphylococcic pyoderma is known to exist in the newborn nursery.

Bacteriological diagnosis with determination of the antibiotic sensitivity pattern is important, but may be difficult to achieve. In 2 of our patients with empyema fluid positive for Staph. aureus, initial nasopharyngeal cultures were reported negative for this organism. A third infant with positive empyema fluid, at the time of a retromammary abscess in the newborn period had a penicillin resistant coagulase positive Staph. aureus on nasopharyngeal culture, but on admission of the infant for staphylococcal empyema at 3 months of age only coagulase negative Staph. aureus among a mixed nasopharyngeal flora was identified. In 10 of the 12 infants with pyopneumothorax empyema fluid was positive for Staph. aureus. One from whom sterile pus was obtained received erythromycin prior to the development of empyema and oleandomycin prior to the initial nasopharyngeal culture. The twelfth infant was transferred from another hospital in the convalescent stage of his disease, and no culture other than the nasopharyngeal, which was positive for Staph. aureus, phage type 81, was obtained.

TREATMENT

Medical management demands maximum dosage of antibiotics according to the sensitivity pattern of the isolated organism. Because pathogenic strains of Staph. aureus tend to be resistant to penicillin and tetracycline, in the present series of infants the development of pyopneumothorax was considered indication for the use of erythromycin, chloromycetin, and/or novobiocin. It may be anticipated, however,

that more and more pathogenic staphylococci will prove resistant to these drugs. Relative sensitivity to kanomycin, vancomycin, and ristocetin should therefore, be determined, whenever possible. Risks of drug toxicity, as well as the severity of the illness and the sensitivity pattern of the etiologic organism, influence the choice of an antibiotic. Once begun antibiotics should be continued for at least 2 weeks after the patient becomes afebrile. Supportive therapy such as oxygen, cautious administration of intravenous fluids and blood, and gastric suction for abdominal distention are important adjuncts in the management of staphylococcic pneumonia.

The appearance of pyopneumothorax constitutes a surgical emergency. The pleural space should be drained by insertion of a catheter to which mild suction is applied. Characteristically thick secretions and the small diameter of the drainage tube necessitate frequent irrigation of the catheter. When there is leakage of air, as in bronchopleural fistula, increased negative intrapleural pressure is necessary to insure expansion of the lung. Expansion of the lung is the most rapid and effective means for bringing about closure of fistulas. Occasionally it is necessary to insert an additional catheter or change the position of one to achieve desired results. Catheters should be removed as soon as they are no longer effective, that is, when the intrapleural space is obliterated and no further drainage is evident.

When the empyema is seen late, administration of protein digestants such as streptokinase-streptodornase or trypsin products through the drainage tube may be effective against the accumulation of thickened fluid. The presence of bronchopleural fistula is not a contraindication to the use of these agents but rather an indication for cautious and proper application. Occasionally in less severe cases, pleural effusion without pneumothorax may occur. Although some reports indicate response to needle aspiration alone, we believe it is a violation of good surgical principles to attempt treatment of full blown suppuration by intermittent needle drainage. Closed suction drainage is therefore indicated in staphylococcal empyema.

The 3 deaths among the 12 infants with empyema drainage reflect the overwhelming nature of the infection rather than the ineffectiveness of surgical drainage. Among the surviving infants in this series none had significant permanent residua. None required decortication or resection, although in 1 instance rupture of a pneumatocele after apparent clearing of the empyema occurred. It is remarkable that almost complete pneumothorax developed in this infant only a few weeks after a full blown empyema had been present. The lung in this instance readily expanded following closed suction drainage.

The development of pneumatoceles is a relatively rare complication of staphylococcal pneumonia. In our series this occurred in only 2 of 20 infants and children. We believe such lesions should be treated expectantly unless respiration is embarrassed; then closed catheter drainage should be applied.

PREVENTION

The problem of hospital acquired staphylococcal infections is discussed elsewhere in this issue. The importance of these infections, however, cannot be overly emphasized. Four of the infants with staphylococcic empyema and 2 of those with pneumonia were discharged from the newborn service of the University of Texas Medical Branch between July and November, 1956, a period when the incidence of staphylococcic infections in our hospital was known to be high. One to 4 months after delivery these infants were readmitted with pulmonary infections due to penicillin resistant Staph. aureus. At least 3 other patients, 2 of whom were hospitalized for leukemia and 1 for a meningomyelocele, acquired pulmonary staphylococcal infections while on the pediatric wards. Seven of our 19 patients, or more than one-third, had previous skin or subcutaneous abscesses prior to the development of pulmonary infection. Any staphylococcal infection, particularly in the newborn or debilitated patient, must receive immediate and vigorous therapy. Prevention of pneumonia and empyema in infants and children is directly related to hospital control of the organism.

SUMMARY

Staphylococcal pneumonia ranks among the more serious bacterial infections which physicians are called upon to treat. Especially in infancy where it is more likely to occur and relentlessly progress to empyema, pyopneumothorax, and death, the presence of pneumonia necessitates prompt consideration of drug resistant staphylococcus as an etiologic possibility. In infants less than 6 months of age where classic signs of the disease may be lacking, being keenly alert to its possibility may be the physician's most valuable diagnostic tool. The presence of pyopneumothorax, a grave prognostic sign, demands prompt surgical intervention as well as appropriate antibiotic therapy.

At the University of Texas Medical Branch among 19 infants and children treated for pulmonary disease due to staphylococcus there was an over-all mortality of almost one-third. In 12 instances pyopneumothorax developed and quickly terminated in death in 3 patients. Surgical drainage and antibiotic therapy resulted in gradual but complete resolution of the process in the remaining 9 infants.

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Bacterial Contamination And Infection In the Severely Burned Patient

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THE PRESENT worldwide concern about virulent hemolytic Staphylococcus aureus is really a "new look" at an old problem which was well recognized even in Biblical times and which has been brought to the fore once again by the development of antibiotic resistant strains. In more recent times it has become increasingly evident that antibiotics and chemotherapy play a less important role in the prevention of local and systemic infection than had been anticipated. Attention is being redirected to study the relationships between the natural body defense mechanisms and the bacterial flora which present real or potential hazards to the healing of burns, as well as wounds in general.

WOUND PROGRESS AND BACTERIA

To understand the significance of micro-organisms in the burn wound, the marked variation of types and numbers of bacteria as well as the patient's ability to resist local and systemic infection must be considered. The surface of the burn wound initially may apparently be sterilized by the intense heat, with blister fluid being free of organisms for a prolonged period. Bacteria in hair follicles and sweat glands, however, may survive and proliferate to provide contamination from beneath the burn layer even though the wound surface may be protected adequately from external sources of contamination.[10]

Burn Environment.—The immediate environment is reflected by the types of bacteria cultured from the burn wound. The occlusive method of local therapy may protect against outside contamination only if the strictest aseptic techniques are observed and very frequent dressing changes are carried out; otherwise rapid saturation with exudate encourages transmission of bacteria across the dressing barrier. The exposure method does not prevent surface contamination, but it can be minimized by a semi-isolation technique. However, free proliferation of the surface organisms is restricted by dryness of the wound.

Intact Eschar.—The variety of the organisms cultured from the dry burn surface usually reflects the nasal and oral flora of the patient himself and of the personnel attending him.[6] While the eschar remains relatively intact and attached to the subcutaneous tissues, the only organisms of importance are the beta hemolytic streptococci and the hemolytic Staph. aureus.

Early Separation of Eschar.—The burn eschar usually begins to separate in the interval between the eighth and the fifteenth day. This phenomenon may occur as early as the fifth day where there is maceration from contact with the bed clothes and dressings or in the cracks produced by joint motion. The moist, softened dead tissue then provides an excellent medium for growth of the organisms present.

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A burn wound may be sterile at first, but bacteria in hair follicles and sweat glands may survive and contamination from outside may be anticipated unless special care is exercised. Indiscriminate use of antibiotics is to be condemned. Healthy granulation tissue and skin grafting usually permit the body's protective mechanisms to destroy harmful bacteria.

During this period, in addition to common nasal and oral organisms, contamination of the wound with enteric flora is almost always encountered. The most commonly encountered organisms include Escherichia coli, Aerobacter aerogenes, paracolons, and members of the Mima-Herella group, while staphylococci (both aureus and albus), Proteus, and Pseudomonas aeruginosa will predominate.

Loss of Eschar.—Following the removal of the slough in a full thickness burn or a premature partial loss of the eschar, generalized invasion is most likely to occur since microbial proliferation then proceeds directly adjacent to viable fat and connective tissue. The danger of this invasion may be prevented or reduced if early grafting can be accomplished. However, during this period the increased susceptibility from loss of the mechanical barrier is accompanied by other contributing factors, including the development of anemia, hypoproteinemia, diminution of adrenal reserve, and general exhaustion of the defense mechanisms of the host. Death occurring at this stage often may result from septicemia alone but usually it appears to be only one factor in a general state of burn "decompensation."[1, 4]

Granulation Tissue.—An effective mechanical and functional barrier to significant invasion of the underlying structures is once more established with the formation of granulation tissue, despite the fact that the surface cannot be sterilized effectively. The number and variety of bacteria have been shown not to be reduced significantly by local or systemic antibacterial agents despite in vitro sensitivities; however, purely mechanical cleansing and frequent dressing changes result in appreciable reduction and control of the bacteria present.[5] Preparation of the granulating wound for skin grafting may be aided by the application of continuous wet dressings for 24 hours prior to surgery. These dressings significantly decrease the wound flora, improve the character of the granulations, and facilitate removal of purulent exudate and necrotic tissue, which would otherwise serve as nutrient for pathological organisms following grafting.

TREATMENT

During the first week following burn trauma, therapy is directed toward emergency measures combating the shock-edema phenomenon and toward general supportive care in the redistribution of fluids and electrolytes. The most treacherous bacterial offender at this time is the beta hemolytic streptococcus which has the ability to spread readily and rapidly through the tissues and into the blood stream. Because of the organism's continued susceptibility to penicillin, this antibiotic is the most effective prophylactic measure, virtually eliminating the danger of blood stream infection. The staphylococci, generally, have a much lower invasive tendency than the beta hemolytic streptococci, particularly during the acute phase when the burn eschar provides a mechanical barrier and the factors of host resistance have not been significantly altered. The routine prophylactic use of any antibiotic against staphylococci is virtually useless unless proper sensitivity patterns of the particular strain are first established, since the high incidence of antibiotic resistant staphylococci is well known and resistance simultaneously to several agents is common.[2, 3, 11]

With the softening of the eschar which provides a pablum for microbial growth during the second phase of the burn wound, therapy must be directed toward removal of this moist dead tissue and maintenance of as dry a wound as possible by selective sharp debridement and coverage of open areas with a single layer of fine mesh gauze (applied either dry or moistened with saline solution or glycerine). Systemic antibiotics tend to eliminate susceptible organisms but allow rapid emergence of nonsusceptible types. After eliminating most of the gram-positive flora by the use of penicillin, the resistant strains of staphylococci found so commonly now in all hospital environments will persist, along with the generally nonsusceptible gram-negative flora. When antibiotics generally effective against the gram-negative flora are administered, Proteus and Pseudomonas species tend to remain by virtue of their usually high resistance to most antibiotics. Locally applied chemotherapeutic preparations have shown no significant effectiveness in clinical studies at this stage.

Treatment of systemic invasion, which may occur during this stage and following partial or total removal of the eschar, depends both on the species of organism involved and on the antibiotic susceptibility pattern of the particular strain. The problem of strains of Staph. aureus resistant to many antibiotics is most frequently encountered; however, Ps. aeruginosa and Proteus species continue to present extremely difficult problems of therapy, some strains resisting all of the agents currently available for the treatment of septicemia. In some instances there is a fatal outcome even though vigorous therapy has been administered using antibiotics shown to be effective against the invading organisms. General supportive maintenance of the patient with correction of anemia, hypoproteinemia, and so forth is not to be overlooked during this phase of care.

As soon as healthy granulation tissue is formed on the burn wound to serve as an effective barrier to bacterial invasion, "routine" antibiotic therapy is not indicated and should be reserved for specific situations. As mentioned previously, mechanical cleansing and frequent dressing changes are the most signifi-

cant factors in therapy at this stage. By covering the exposed granulating areas with skin grafts the continuity of the skin surface is restored and the surface exudates are eliminated. The functional elements in the granulation tissue and the bactericidal activity of the body fluids combine to destroy extremely rapidly the organisms not removed previously by the cleansing process (fig. 1).[7, 9]

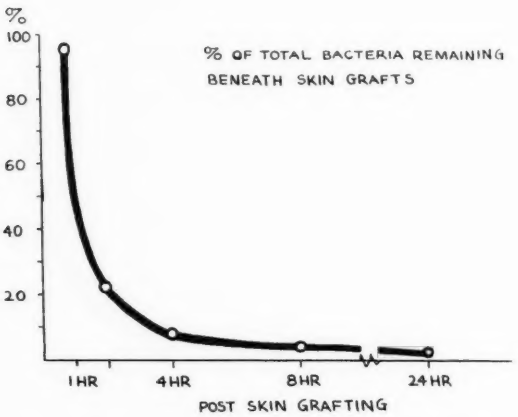

Fig. 1. Graph showing the rapidity with which bacteria in a burn wound are destroyed following skin grafting.

The inclusion of antibacterial agents in soaks and the use of systemic antibiotic therapy have been shown to have no appreciable effect on altering the quantity or types of organisms present or in affecting the success or "take" of skin grafts, except in the case of beta hemolytic streptococcic infection. Because of concern about the antibiotic resistant hemolytic Staph. aureus organisms, particularly phage type 80/81, we have compared the skin graft "take" in wounds with positive cultures for it and other organisms and have found no significant difference in percentage of "take" (table 1). Systemic antibiotic therapy should be used after skin grafting only as indicated and not as a routine procedure.

TABLE 1.—*Relationship of Staphylococcus aureus (Phage Type 81) to Skin Grafting.*

	Culture Positive for Staph. aureus Phage Type 81	Culture Negative for Staph. aureus Phage Type 81
No. of patients	13	11
Average burn area	30%	11%
No. of skin grafts	24	18
Per cent of "graft take"	67%	73%

SUMMARY AND CONCLUSION

A brief history of the progression of the burn wound with attention to bacterial contamination and infection has been reviewed and general therapy relative to the conditions of the wound surface at various stages has been outlined. An attempt has been made to focus attention on the changing relationships between the host's defenses and the fluctuating bacterial flora during hospitalization. Indiscriminate use of antibiotics is to be condemned, their use being limited to specific indications and as adjuncts to basic surgical techniques.

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Medical Education Week Proclaimed by Governor

Medical Education Week in Texas was proclaimed by Governor Price Daniel for April 19-25. In so doing, he hailed the medical schools as having made vital contributions to the progress of Texas.

"America's material strength lies in the vitality and good health of its people," the Governor stated. "Without these qualities, this Nation could not maintain a strong military force, keep men and women at their jobs in industry or produce farm products which feed us and are exported through the world." The special week coincided with the beginning of the Texas Medical Association's 1959 convention in San Antonio.

Governor Daniel's proclamation went on to say, "the medical schools of our nation represent the foundation of the entire health structure."

Certain Organisms In the Upper Respiratory Tract In Children

A Study of Staphylococcus aureus, Pneumococcus, Beta Hemolytic Streptococcus, and Hemophilus Species

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Staphylococcus aureus, pneumococcus, beta hemolytic streptococcus, and hemophilus species were isolated from swabs taken on the same occasion from the anterior nares, oropharynx, and nasopharynx of 189 pediatric patients. The results indicate a potentially wide margin of error in assessing bacteria of the upper respiratory tract after swabbing one area alone.

THE PROMINENCE of staphylococcal disease, especially staphylococcal disease of the respiratory tract, suggested reevaluation of certain aspects of the methodology of obtaining bacterial cultures from the upper respiratory passages of children. It has been the practice for a number of years on the pediatric service of the University of Texas Medical Branch to use a nasopharyngeal swab for obtaining material for these cultures. The present study was designed to evaluate the relative merit of anterior nasal, oropharyngeal, and nasopharyngeal swabs for determining the bacterial flora of the upper respiratory passages of infants and children.

Culture material was obtained by swabbing the anterior nares, oropharynx, and nasopharynx separately on the same occasion in each of 189 pediatric patients seen in the out patient dispensary. Patients were categorized only as to age and presence or absence of clinical findings of respiratory tract infection. With few exceptions, none had received antibacterial medications for the previous 2 to 3 weeks. The distribution of patient material according to age group and presence or absence of respiratory tract infection is presented in table 1. Patients having no respiratory tract infection were seen for a variety of clinical conditions and for well child care. Most of the children having respiratory tract infection were seen primarily for this condition and had disease of moderate severity.

TABLE 1.—*Age Groups of 189 Patients With and Without Respiratory Tract Infection.*

Age Groups	No. of Subjects With Infection	Without Infection	Total
Under 3 mo.	7	9	16
3-5 mo.	5	4	9
6-11 mo.	13	7	20
12-23 mo.	19	10	29
2-5 yr.	23	23	46
6-14 yr.	27	42	69
Total	94	95	189

The sequence of taking swabs for bacterial culture was anterior nares, oropharynx, then nasopharynx. Both anterior nares were swabbed to a depth of about 1 cm. with a cotton tipped wood applicator wet with physiologic saline solution. The posterior wall and both tonsillar areas of the oropharynx were swabbed with a dry, cotton tipped wood applicator. The nasopharynx was swabbed by passing a cotton tipped 28 gauge stainless steel wire transnasally, with no provision for avoiding the mucous membrane of the anterior nares.

The swabs were taken immediately to the laboratory where each was rubbed on separate blood agar plates and chocolate agar plates, then placed in a tube containing 3 ml. of enrichment broth. The medium for the plates was Casman Medium Base (Difco), pH 7.3, containing about 7 per cent banked human blood. The enrichment broth was Heart Infusion Broth (Difco) containing 1:16,000 sodium azide, 1:500,000 crystal violet, and 1:5,000 dextrose. The plates were streaked for isolation with a platinum loop and incubated for 24 hours in a candle jar at 37.5 C. Readings were made and the plates reincubated for an additional 24 hours under normal atmospheric conditions. The enrichment broth containing the swabs was incubated for 24 hours and one loopful subcultured to 4 per cent blood agar plates. These plates were then incubated for 24 hours and read for the presence of beta hemolytic strepto-

Study supported in part by a grant from Hoffmann-La-Roche, Inc.

cocci. Growth of all species of bacteria was recorded, but particular emphasis was placed upon identifying Staphylococcus aureus, pneumococcus, beta hemolytic streptococcus, and hemophilus species. Identification was made by growth requirements, colony morphology, gram stain, hemolysis, bile solubility, and pigment production.

The findings in regard to these four groups of organisms in the 189 patients studied are presented in the accompanying tables. Of the 189 patients, 124 (65.6 per cent) harbored Staph. aureus in the upper respiratory tract (table 2). The incidence was greater

TABLE 2.—*Incidence of Isolation of Staphylococcus aureus from the Anterior Nares, Oropharynx, and Nasopharynx in 189 Patients.*

Site*	94 With Infection	95 Without Infection	Total 189
AN	13	18	31
OP	5	6	11
NP	1	0	1
AN+OP	2	2	4
AN+NP	17	14	31
OP+NP	2	2	4
AN+OP+NP	15	27	42
Patients positive	55 (58.5%)	69 (72.6%)	124 (65.6%)

*Organism isolated from designated site or sites only.

TABLE 2a.—*Total Isolations from Each Site in 124 Patients Positive for Staphylococcus aureus.*

Site	55 With Infection	69 Without Infection	Total 124
Anterior nares	47 (85.5%)	61 (88.4%)	108 (87.1%)
Oropharynx	24 (43.6%)	37 (53.6%)	61 (49.2%)
Nasopharynx	35 (63.6%)	43 (62.3%)	78 (62.9%)

in the patients having no evidence of respiratory tract infection. Substantial numbers of patients harboring Staph. aureus in the upper respiratory tract were not detected except by cultures from the anterior nares. However, about 13 per cent of the patients with Staph. aureus in the upper respiratory tract would not have been detected by cultures from the anterior nares (table 2a.) A similar finding has been reported by Drimmie[1] from study of 131 hospitalized children, most of whom had pneumonia and bronchitis. Rippon and Vogelsang,[5] on taking repeated swabs from the throat and from the nasal cavities of 67 hospitalized children, found the throat positive for coagulase positive Staph. aureus in 59 per cent of 505 examinations, the nasal cavities positive in only 49 per cent. Seven patients in 73 examinations showed constantly positive throat swabs but negative nasal cavity swabs. Another 6 patients in 69 examinations showed occasionally positive throat swabs with negative nasal cavity swabs. Thus 19 per cent of these 67 children harboring coagulase positive Staph. aureus in the upper respiratory passages were not detected by nasal cavity swabs. Hurst,[2] in serial studies of 34 infants observed from birth until 6 to 12 months of age, found that throat carriage of hospital acquired strains of Staph. aureus usually persisted longer than did nose carriage. These infants were also demonstrated to harbor multiple strains of Staph. aureus simultaneously, a fact of obvious clinical importance in interpreting results of the usual laboratory identification of Staph. aureus in which a single colony is selected for study.

Many more children were found to be harboring pneumococcus than Staph. aureus. The data in table 3 show that 178 of 189 patients (94.2 per cent) harbored pneumococcus in the upper respiratory tract. There was about the same incidence in patients without as with respiratory tract infection. The oropharyngeal swab detected 10 per cent more of the positives than did the nasopharyngeal swab (table 3a). Our incidence of isolation of pneumococcus

TABLE 3.—*Incidence of Isolation of Pneumococcus from the Anterior Nares, Oropharynx, and Nasopharynx in 189 Patients.*

Site*	94 With Infection	95 Without Infection	Total 189
AN	0	0	0
OP	9	14	23
NP	2	7	9
AN+OP	2	1	3
AN+NP	0	0	0
OP+NP	32	59	91
AN+OP+NP	42	10	52
Patients positive	87 (92.6%)	91 (95.8%)	178 (94.2%)

*Organism isolated from designated site or sites only.

TABLE 3a.—*Total Isolations from Each Site in 178 Patients Positive for Pneumococcus.*

Site	87 With Infection	91 Without Infection	Total 178
Anterior nares	44 (50.6%)	11 (12.1%)	55 (30.9%)
Oropharynx	85 (97.7%)	84 (92.3%)	169 (94.9%)
Nasopharynx	76 (87.4%)	76 (83.5%)	152 (85.4%)

from the oropharynx was much greater than that reported by Drimmie,[1] who found the posterior nares positive for pneumococcus in 51.2 per cent and the throat positive in 10.0 per cent of 541 swabbings from 131 children.

Beta hemolytic streptococcus was found much less frequently in the upper respiratory passages than was Staph. aureus or pneumococcus (table 4). The frequency of isolation from the oropharynx was greater than from the other sites (table 4a), a finding in agreement with the data of LaBoccetta and others,[3] and with the findings of Rantz and others.[4] It is emphasized, however, that a number of patients

TABLE 4.—*Incidence of Isolation of Beta Hemolytic Streptococcus from the Anterior Nares, Oropharynx, and Nasopharynx in 189 Patients.*

Site*	94 With Infection	95 Without Infection	Total 189
AN	0	0	0
OP	5	10	15
NP	2	1	3
AN+OP	0	0	0
AN+NP	0	1	1
OP+NP	5	4	9
AN+OP+NP	2	1	3
Patients positive	14 (14.9%)	17 (17.9%)	31 (16.4%)

*Organism isolated from designated site or sites only.

TABLE 4a.—*Total Isolations from Each Site in 31 Patients Positive for Beta Hemolytic Streptococcus.*

Site	14 With Infection	17 Without Infection	Total 31
Anterior nares	2 (14.3%)	2 (11.8%)	4 (12.9%)
Oropharynx	12 (85.7%)	15 (88.2%)	27 (87.1%)
Nasopharynx	9 (64.4%)	7 (41.2%)	16 (51.6%)

harboring this organism in the upper respiratory tract would not have been detected with oropharyngeal swabs alone.

Hemophilus species were isolated with about the same frequency as Staph. aureus in this series of patients (table 5). Swabs of the oropharynx yielded hemophilus species much more often than did swabs of the nasopharynx (table 5a). This was true in both groups of patients, although the difference was less striking in the group with respiratory tract infection.

Our findings regarding the relative merit of anterior nasal, oropharyngeal, and nasopharyngeal swabs for determining the bacterial flora of the upper respiratory tract may be considered from the standpoint of failures to isolate a particular organism from any one site, even though the organism is present at another site. Our data, portrayed from this viewpoint, are summarized in figure 1. Staph. aureus was isolated most frequently from the anterior nares. However, of the patients positive for Staph. aureus, 13 per cent were negative by anterior nasal swab, 51 per cent negative by oropharyngeal swab, and 37 per cent negative by nasopharyngeal swab. Pneumococcus, beta hemolytic streptococcus, and hemophilus species were isolated most frequently from the oropharynx. Of the patients positive for pneumococcus, anterior nasal swab was negative in 69 per cent, oropharyngeal swab negative in 5 per cent, and nasopharyngeal swab negative in 15 per cent. Of the patients positive for beta hemolytic streptococcus, 87 per cent were negative by anterior nasal swab, 13

TABLE 5.—*Incidence of Isolation of Hemophilus Species from the Anterior Nares, Oropharynx, and Nasopharynx in 189 Patients.*

Site*	94 With Infection	95 Without Infection	Total 189
AN	2	0	2
OP	20	29	49
NP	6	6	12
AN+OP	1	1	2
AN+NP	2	0	2
OP+NP	22	26	48
AN+OP+NP	12	1	13
Patients positive	65 (69.1%)	63 (66.3%)	128 (67.7%)

*Organism isolated from designated site or sites only.

TABLE 5a.—*Total Isolations from Each Site in 128 Patients Positive for Hemophilus Species.*

Site	65 With Infection	63 Without Infection	Total 128
Anterior nares	17 (26.2%)	2 (3.2%)	19 (14.8%)
Oropharynx	55 (84.6%)	57 (90.5%)	112 (87.5%)
Nasopharynx	42 (64.6%)	33 (52.4%)	75 (58.6%)

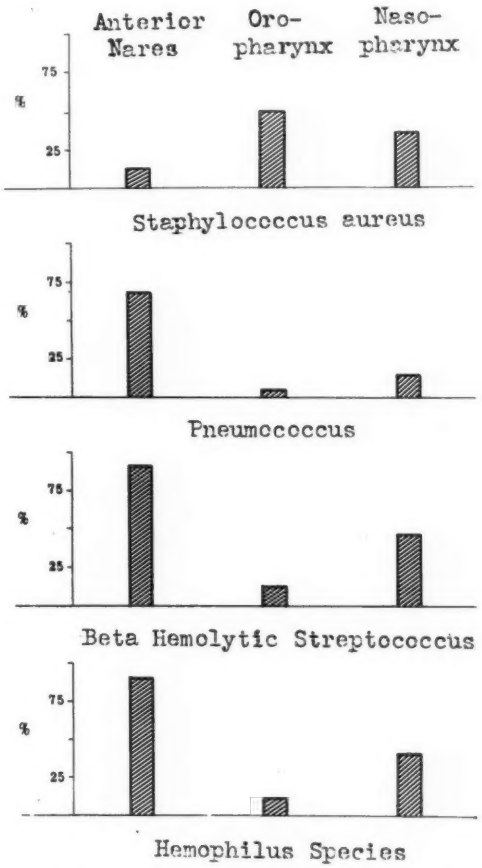

Fig. 1. Percentage of patients negative at the indicated site yet harboring the designated organism in the upper respiratory tract.

per cent negative by oropharyngeal swab, and 48 per cent negative by nasopharyngeal swab. Of the patients positive for hemophilus species, 85 per cent were negative by anterior nasal swab, 12 per cent negative by oropharyngeal swab, and 41 per cent negative by nasopharyngeal swab.

SUMMARY

Data have been presented concerning isolations of Staph. aureus, pneumococcus, beta hemolytic streptococcus, and hemophilus species from 189 pediatric patients who, on the same occasion, had swabs taken from the anterior nares, oropharynx, and nasopharynx. The findings indicate that a potentially wide margin of error exists in assessing the bacterial flora of the upper respiratory tract in infants and children on the basis of material obtained by anterior nasal, oropharyngeal, or nasopharyngeal swab alone, and that swabs of all three sites may provide sufficiently superior information to warrant routine use.

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Amines May Lead to Drugs Useful Against Mental Illness

Basic research at the National Heart Institute on the functions of amines as brain hormones and on the enzymes that make and destroy these chemicals in the human body is leading to the development of drugs which may be useful against hypertension, epilepsy, and mental illness, according to the United States Department of Health, Education, and Welfare.

The amines of greatest current interest are serotonin and norepinephrine. These are found in the brain and other body tissues, where they may influence blood pressure, emotions, and other functions that are beyond conscious control. The drugs under study are compounds which counteract monoamine oxidase, an enzyme which normally destroys these amines in the body.

Environmental Control of Staphylococcus in A General Hospital

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Basic practices of sanitation and personal hygiene are important in the control of staphylococcus in a general hospital. Air conditioning, linens and bedding, food and utensils, waste disposal, housekeeping practices, and personal hygiene present special problems requiring careful techniques and watchfulness.

IN OUR EFFORTS to keep abreast of the newer developments and discoveries in effective medical practice, we have been inclined to neglect, in varying degrees, some of the basic effective practices of our predecessors who relied more upon good sanitation and personal hygiene than upon any other single technique. In early days most hospitals had no mechanical air conditioning; outside air was relatively "clean" and free of contaminants; the 40 hour work week was not known; and "Cleanliness was next to Godliness." Today we have mechanical ventilation and cooling or air conditioning, more help than we have ever had, fewer work hours, unlimited supplies of antibiotics, and what appears to be a lack of a desire to practice strict personal hygiene and sanitation.

The problem of the spread of the pigmented staphylococcus in a general hospital is no greater and no less than in other hospitals. Recognizing the

The technical work for this study was done by the following medical students whose interest and thoroughness is to be commended: Alfred Gutierrez, Billy Havens, Jim Hollingsworth, Samuel Newson, Raul Rivera, Morris Schultz, James Wiegreffe.

importance and necessity of providing a safe and sanitary environment in hospitals, we started several years ago at the University of Texas Medical Branch to look into how we were doing things, how clean we were, and how careless and insanitary practices might be responsible for the spread of pathogens. Some of our more significant findings follow.

PROBLEMS AND PROCEDURES

Air Conditioning.—First, we familiarized ourselves with our air conditioning systems. We found we had a central system and window and 5 ton package units in certain areas. The central system consists of (1) A conventional system with ceiling outlets carrying 30 per cent of the hospital air conditioning load. This system supplies 25 per cent fresh air and 75 per cent recirculated air—all of which has to be filtered, purified, and dehumidified (cooled). (2) A conduit system which has cooling units and outlets beneath the ward windows. It carries 70 per cent of the hospital load and consists of 25 per cent fresh filtered air and 75 per cent unfiltered, recirculated ward air. The window and the 5 ton package units are placed in random areas of the out-patient services where no central air conditioning is available.

As is generally true, most people think of air conditioning only for human comfort through cooling and drying the air. Little thought is given to the requirement that hospital air, especially, must be as free as possible of pathogens. Hence, little attention is devoted to proper maintenance of filters and other means of removing air-borne bacteria.

The "fresh" incoming air as well as the recirculating air before and after filtration was sampled in many hospital and clinic areas (fig. 1). In general, the number of air-borne organisms found was correlated with the amount of activity and the number of people present in the areas sampled. Staphylococcus aureus was found frequently—particularly where it was known to be present on patients.

Fig. 1. Organisms cultured from an air sample, the plate exposed 15 minutes.

Air quality control is possible, but to accomplish it by air conditioning three fundamentals are essential. The system must have (1) proper design, (2) correct installation, and (3) effective maintenance. The third requirement is often neglected.

Linens and Bedding.—The next step in our study was to observe procedures in handling clean and dirty linens, laundry, mattresses, blankets, and pillows. Based on our observations we recommended that clean laundry and linens be stored in clean places (fig. 2), not in the same closet with the dirty; mattresses be cleaned and sanitized for each new patient. This is not easy. Autoclaving may require hauling the mattresses over long distances through both clean and dirty areas. Autoclaving deteriorates the fabric, and is costly. Plastic covers properly sanitized are effective, but these, too, require constant vigilance and care.

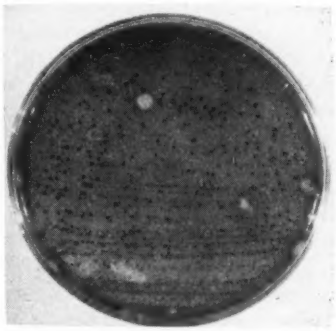

Fig. 2. Staphylococcus aureus colonies (phage unknown) from a laundry cart hauling clean linens.

Woolen blankets are still commonly used and passed from patient to patient without proper sterilization. Washing woolen blankets without shrinkage is difficult. Other methods of cleaning them are costly and inconvenient. It appears that the only effective control of this potentially hazardous situation is to replace all woolen blankets with washable blankets and to maintain a temperature and humidity in the hospital requiring a lesser need for extra covers. Pillows also need adequate care—sterilization and changing for each new patient.

Food and Utensils.—The safe and sanitary handling of food, dishes, and utensils (fig. 3) in any hospital is a problem not only of having adequate and effective equipment properly installed and correctly maintained, but also of having well informed, dedicated, and properly motivated food handlers who practice good personal hygiene. To sanitize dishes properly only to contaminate them subsequently by improper handling is an ever present occurrence. The

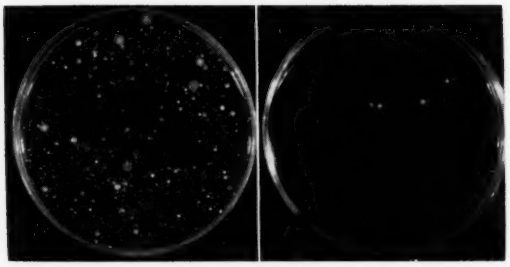

Fig. 3. Organisms from swabs of forks, the left rinsed at a temperature of 140 F. and the right at 190 F.

correct handling, displaying, and serving of foods is not always easy. Constant supervision and unending vigilance is required. Continuing in-service training, inspections, and bacteriological appraisals are essential. Frequent "swabbing" of dishes may reveal the presence of the staphylococcus and other pathogens.

The handling of ice—its making, storage, and use—is often a source of contamination. It is not uncommon to see patients, visitors, and employees dip ice with dirty hands, cups, or scoops. Ice water pitchers are rarely given the sanitary supervision to which they are entitled.

Waste.—Safe disposal of wastes of any and all kinds in or from a hospital is extremely important. Contaminated materials are frequently transported long distances and often through clean areas. Effective and labeled bags and receptacles are essential. The labeling must be understood by the person who places material into them and by the person who receives them and removes the contents. Pathogens including staphylococci are often present and may be spread by improper handling of wastes.

Housekeeping.—All members of the housekeeping staff are "key" people in the control of the spread of staphylococcus. Correct and effective methods of cleansing and sanitizing floors and walls, counters (fig. 4), booths, toilets, lavatories, urinals, and bedpans are essential. Accumulation of dust and the spread of such by dry sweeping and dusting has no place in a modern and properly run hospital. Good housekeeping in a busy hospital is difficult to accomplish without interference with other hospital activities.

There are certain hospital areas and pieces of equipment which need special care. Among these are the utility rooms, dressing carts (fig. 5), examining and treatment rooms, and tables. The prevention of contamination and effective sanitization are an ever present requirement with which all personnel should be familiar and practice. An area frequently neglected is the Hubbard tank (fig. 6) or its equivalent. Additional items are masks, bottle warmers, and drinking fountains. The latter are frequently insanitary

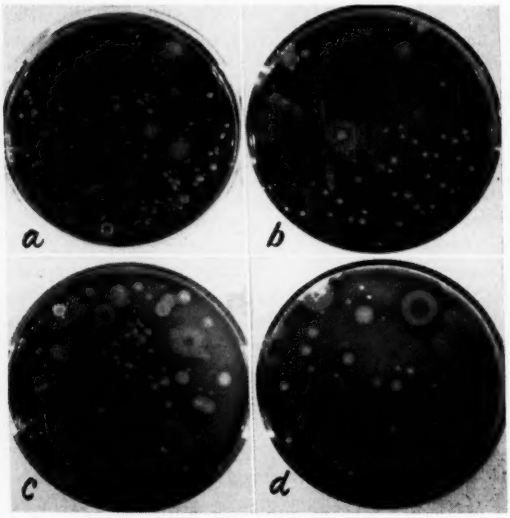

Fig. 4. Organisms from swabs of the pay side of the pharmacy booth: **(a)** before cleaning, **(b)** after solution 1, **(c)** after solution 2, **(d)** after solution 3.

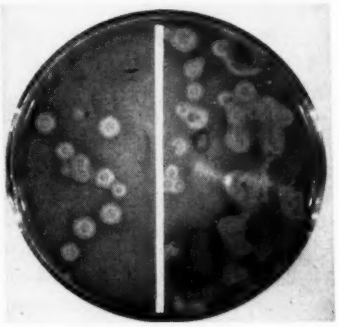

Fig. 5. Cultures from a dressing cart, at left from the bottom shelf and at right from inside the dressing bag.

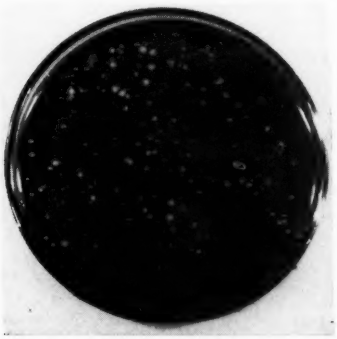

Fig. 6. Organisms from a swab from a Hubbard tank used by 4 burn patients, cleaned after each use, and ready for the fifth patient.

rather than sanitary. It is not uncommon to see a patient, visitor, or employee place his mouth directly over the water spout and literally suck. Fountains to be safe must be of a proper design, correctly installed, and effectively maintained. Staphylococcus aureus has been found frequently on the mouthpiece of some fountains (fig. 7).

Fig. 7. Staphylococcus aureus (not phage 81) from a swab of a drinking fountain head.

Personal Hygiene.—Finally, one comes to what is probably the most important control measure in preventing the spread of the staphylococcus in a hospital. This is good personal hygiene. The use of adequate soap and warm water is as good a preventive measure today as it was 100 years ago. Effective hand washing between each patient as well as at other appropriate times is essential (fig. 8). Handling

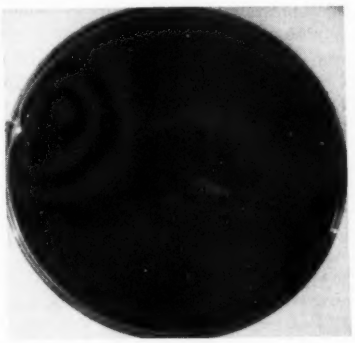

Fig. 8. Organisms from a swab of the hand of a nurse.

sterile things in a sterile manner is urgent. Sitting on the patient's bed, contaminating one's own clothing, and going from bed to bed or from a patient to a clean area or even home should not be done without proper precautions. In summary, what is clean must be kept clean and what is dirty must be made clean.

Staphylococcus in a hospital will never be eliminated. The spread of it, however, can be by breaking the chain of transmission.

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Staphylococcus as A Hospital Problem And Its Control

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Infectious disease control is of concern to hospital governing boards, medical staffs, and administrators. The administrator can direct a control program most effectively with the guidance of an infection committee representing medical, nursing, administrative, and key department heads. A good system of follow-up, continuing education, vigilance, and team effort are required.

STAPHYLOCOCCAL infections have become a topic of concern in hospital circles because this contagious threat developed with such rapidity that few institutions were organized to cope with the situation effectively. From 1950 to 1954, inclusive, only two titles referring to staphylococcal infections appeared in the *Cumulative Index to Hospital Literature,* while in this same source covering only the first 6 months of 1958 more than 50 references were found. Although control measures have been instituted in many hospitals, the danger of infection still lurks.

It is generally accepted that staphylococcal disease also exists outside the hospitals.[5] More important, there are undetected carriers among the hospital employees as well as among the patient populations.[2] Hence, with the organisms ever present, it becomes incumbent upon governing boards, hospital administrators, and medical staffs to see that their hospitals

are properly organized to control staphylococcal infections.

HOSPITAL RESPONSIBILITY

Hospital boards of trustees should be vitally concerned with the dangers of these staphylococcal infections inasmuch as ultimately it is the governing body's responsibility to see that good patient care is rendered in their respective institutions. Quite disconcerting is the fact that hospitals may be held legally responsible for the development of hospital acquired infection.[5]

Faced with this situation, governing bodies are duty bound to insure that hospital facilities meet accepted standards, hospitals are designed to facilitate infectious disease control, sufficient operating funds are available to permit good patient care, and adequate infectious disease protective measures are instituted and carried out. The board of trustees also has the responsibility to see that there is an effective hospital organization which will foster the development of a good and safe patient care program. The administrator acts for the board in directing and maintaining an effective control program.

ORGANIZING FOR CONTROL

How to organize for infectious disease control is a problem now facing many hospitals. There appears to be considerable feeling that this challenge can be met best through committee effort with medical staff, nursing, hospital administration, and key hospital department heads represented. The Joint Commission on Accreditation of Hospitals also recommends that "every hospital have an *Infection Committee* with the responsibility of investigation, control and prevention of infections within hospitals."[1] Generally speaking, the composition of this committee should be sufficiently broad to include representation from the major groups or departments directly concerned with this problem. Although this will vary from hospital to hospital, suggested infection committee membership includes representatives of major clinical departments, the administrator, the director of nursing, the hospital engineer, and a bacteriologist. It is urged that the local health officer serve in a consulting capacity to the committee.[4] For technical consultation other persons from the hospital family can be brought into the committee's deliberations as they are needed. If too many elements are represented, the group may become unwieldy.

The infection committee should meet regularly at frequent intervals, and its responsibilities should include the following:

1. To develop a system of reporting diseases and keeping records which can serve as a basis for studying infections.
2. To investigate cases of infection and review infection rates.
3. To establish infectious disease control procedures and policies and make recommendations relative to their enforcement.
4. To determine that adequate bacteriological laboratory facilities are available. If this is not possible in the hospital, arrangements should be made to obtain reliable services elsewhere.
5. To develop an infectious disease prevention orientation program including a continuing educational program for medical and hospital personnel.
6. To recommend to the executive committee of the medical staff, control measures relative to the indiscriminate use of antibiotics, and rules and regulations relative to infectious disease medical practice.
7. To foster investigative efforts relative to infectious disease control.
8. To serve in an advisory capacity to the hospital administrator in the organization, planning, and control of the infectious disease control program.

Organization for staphylococcal control also extends beyond hospital walls and involves cooperation with other hospitals and groups such as hospital councils, medical societies, health departments, and health councils.[4]

PLANNING CONTROL

In planning an infectious disease control program the following areas should be considered:

1. Review of aseptic techniques and practices. The area of personal contact with the patient probably offers the greatest opportunity to check spread of infection.
2. Survey of environmental sanitation conditions and practices such as control of dust, proper waste handling and disposal, careful handling of linen, safe food service practices, effective cleaning of the building and fixtures, and keeping air pollution to a minimum by maintaining properly functioning ventilating and air conditioning units.
3. Establishment of isolation conditions. If the hospital has large wards and sufficient volume of infectious cases, certain wards may be used for this purpose, whereas in many hospitals good isolation technique can be accomplished in individual rooms.
4. Control of traffic to be surveyed in areas such as operating rooms, delivery rooms, and nurseries.
5. Securing the essential bacteriologic services either in or outside the hospital.
6. Identification and exclusion of infected employees from patient contact.
7. Formulation of policies relative to the treatment, continued employment, transfer to other hospital areas, and remuneration of personnel who develop staphylococcal problems, so as to obtain carrier control of employees and patients.
8. Maintenance of a continuing educational program for medical staff, new and old employees, and the public.

9. Securing cooperation in the program at all organizational levels and creating the spirit of necessary sustained effort.

Details of the program instituted at the University of Texas Medical Branch Hospitals in these areas have been reported in a recent publication by Dr. Stuart Mudd.[3]

DIRECTION OF CONTROL ACTIVITY

Because staphylococcal control involves every hospital department, direction and coordination of the hospital's disease control activities are best accomplished by the hospital administrator. Acting upon the recommendations of the infectious disease committee, the hospital administrator should describe the infectious disease control program and its policies, practices, and procedures to all hospital departments and medical personnel. The administrator must insist that periodically his department heads check carefully to prevent deviations from procedure. Also, the task of directing the public relations aspects of the staphylococcal disease problem is logically the administrator's responsibility.

PROGRAM CONTROL

An effective infectious disease control program must be planned, organized, and placed into operation, but to assure continuous proper functioning requires continuous checking of these efforts. Suggested administrative control methods include:

1. Daily reporting of infections by the nursing department.
2. Monthly review of infection rates by the infection committee.
3. Weekly spot check inspections of environmental sanitation conditions in the hospital wards and departments by hospital administrative personnel.
4. Periodic bacteriological culture studies of buildings, fixtures, and equipment.
5. Periodic review of infectious disease control practices and procedures.
6. Reports of violations of existing policies, practices, and procedures. These are to serve as the basis of administrative directives and action inculcating the spirit of constructive suggestion and united endeavor creating pride in accomplishment.
7. Use of available inspection services of local and state health departments.
8. Employment of a sanitarian in the case of large hospitals to check environmental sanitation operations and to conduct educational programs.

Paramount in the control program is the appointment of a hospital infectious disease control officer. He should be a member of the medical staff and preferably serve ex officio on the infection committee. It is recommended that his appointment be made by the executive committee of the staff upon the recommendation of the infection committee. This individual may serve in an advisory capacity to other members of the medical profession and provide technical assistance relative to management of infections. He also should serve in an advisory capacity to the administrator in the interim between infection committee meetings.

TEAM EFFORT

For maximum effectiveness, the infectious disease control program must create in the minds of all hospital and medical staff personnel the feeling that team effort prevails. Single individuals or small groups of individuals cannot accomplish the job alone inasmuch as one is dealing with a problem of many facets. Everyone must be made to feel his individual responsibility in the program and the need for continued vigilance in controlling infectious hazards.[1] By carrying out a program successfully not only will staphylococcal infections be kept to a minimum but all types of dangerous cross infections be reduced drastically.

SUMMARY

Infectious disease control is of major concern to hospital governing boards, medical staffs, and administrators. The hospital administrator, in directing an infectious disease control program, can do so most effectively when he is guided by and aided by an infection committee representing medical, nursing, administration, and key department heads. Successful programs of infectious disease control have many facets, hence require good systems of follow-up, continuing education, vigilance, and team effort.

REFERENCES

1. Babcock, K. B.: Infections in Hospitals, Chicago, American Hospital Association Bull. Joint Commission on Accreditation of Hospitals, Aug., 1958.

2. Brown, J. W.: Hygiene and Education Within Hospitals to Prevent Staphylococcic Infections, J.A.M.A. 166:1185-1191 (March 8) 1958.

3. Mudd, S.: Sterile Technique in Professional Service Departments, Hospital Progress 39:47 (July) 1958.

4. Prevention and Control of Staphylococcus Infections in Hospitals, Chicago, American Hospital Association, Bull. 1, May 21, 1958.

5. Proceedings of National Conference on Hospital Acquired Staphylococcal Disease. Washington, D. C., U. S. Department of Health, Education and Welfare, Oct. 1958.

Mr. Hennings, 425 Harvard St., S.E., University of Minnesota Campus, Minneapolis 14, Minn.

MEDICAL NEWS

★ Coming Meetings

Texas Medical Association, Fort Worth, April 9-12, 1960 (Executive Board, Sept. 27, 1959). Dr. F. W. Yeager, Corpus Christi, Pres.; Mr. C. Lincoln Williston, 1801 North Lamar Blvd., Austin, Exec. Secy.

American Medical Association, Atlantic City, June 8-12, 1959. Dr. Gunnar Gundersen, La Crosse, Wis., Pres.; Dr. F. J. L. Blasingame, 535 North Dearborn, Chicago 10, Exec. Vice-Pres.

Current Meetings

MAY

American Gynecological Society, Hot Springs, Va., May 25-27, 1959. Dr. Lewis C. Scheffey, Philadelphia, Pres.; Dr. A. A. Marchetti, 3800 Reservoir Rd. N.W., Washington 7, D. C., Secy.

American Ophthalmological Society, Hot Springs, Va., May 28-30, 1959. Dr. Derrick Vail, Chicago, Pres.; Dr. M. C. Wheeler, 30 W. 59th, New York 19, Secy.

American Pediatric Society, Buck Hill Falls, Pa., May 6-8, 1959. Dr. Joseph Stokes, Jr., Philadelphia, Pres.; Dr. A. C. McGuinness, Room 1036, 2800 Quebec St., N.W., Washington 8, D. C., Secy.

National Tuberculosis Association, Chicago, May 24-29, 1959. Dr. Mario M. Fischer, New York, Pres.; Mrs. Wallace B. White, 1790 Broadway, New York 19, Secy.

Texas Hospital Association, Houston, May 11-14, 1959. Mr. W. P. Earngey, Jr., Fort Worth, Pres.; Mr. O. Ray Hurst, 2208 Main, Dallas, Executive Director.

JUNE

American College of Chest Physicians, Atlantic City, June 3-7, 1959. Dr. Donald R. McKay, Buffalo, Pres.; Mr. Murray Kornfeld, 112 E. Chestnut, Chicago 11, Executive Secy.

American Dermatological Association, Atlantic City, June 1-4, 1959. Dr. J. Lamar Callaway, Durham, N. C., Pres.; Dr. Wiley M. Sams, 25 Southeast 2nd Ave., Miami, Secy.

American Gastroenterological Association, Atlantic City, June 5-6, 1959. Dr. C. J. Barborka, Chicago, Pres.; Dr. F. J. Ingelfinger, 65 E. Newton, Boston 18, Secy.

American Neurological Association, Atlantic City, June 15-17, 1959. Dr. Bernard J. Alpers, Philadelphia, Pres.; Dr. Charles Rupp, 133 S. 36th, Philadelphia 4, Secy.

American Orthopaedic Association, Lake Placid, N. Y., June 15-18, 1959. Dr. C. Leslie Mitchell, Detroit, Pres.; Dr. Lee Ramsay Straub, 535 East 70th St., New York 21, Secy.

American Proctologic Society, Atlantic City, June 15-18, 1959. Dr. Karl Zimmerman, Pittsburgh, Pres.; Dr. Norman D. Nigro, 10 Peterboro, Detroit 1, Secy.

Texas State Board of Medical Examiners, Fort Worth, June 22-24, 1959. Dr. M. H. Crabb, Fort Worth, Secy.; Mrs. Luanna Reddin, 1714 Medical Arts Bldg., Fort Worth, Assistant Secy.

National and Regional

American Academy of Allergy, Hollywood-by-the-Sea, Fla., Jan. 11-13, 1960. Dr. Francis C. Lowell, Boston, Pres.; Dr. Joseph Noah, 100 N. Euclid Ave., St. Louis 8, Mo., Secy.

American Academy of Dermatology and Syphilology, Chicago, Dec. 5-10, 1959. Dr. A. C. Cipollaro, New York, Pres.; Dr. Robert R. Kierland, Mayo Clinic, Rochester, Minn., Secy.

American Academy of General Practice, Philadelphia, March 19-24, 1960. Dr. Fount Richardson, Fayetteville, Ark., Pres.; Mr. Mac F. Cahal, Volker Blvd. at Brookside, Kansas City 12, Executive Secy.

American Academy of Ophthalmology and Otolaryngology, Chicago, Oct. 11-16, 1959. Dr. John H. Dunnington, New York, Pres.; Dr. W. L. Benedict, 15 Second St. S.W., Rochester, Minn., Secy.

American Academy of Pediatrics, Chicago, Oct. 5-8, 1959. Dr. James C. Overall, Nashville, Pres.; Dr. E. H. Christopherson, 1801 Hinman Ave., Evanston, Ill., Executive Secy.

American Association for Maternal and Infant Health, 1960. Mr. Howard I. Wells, Jr., 116 S. Michigan Ave., Chicago 3, Executive Secy.

American Association for Thoracic Surgery, Miami Beach, May 11-13, 1960. Dr. William E. Adams, Chicago, Pres.; Dr. Hiram T. Langston, 7730 Corondelet Ave., St. Louis 5, Secy.

American Association of Genito-Urinary Surgeons. Dr. John A. Taylor, New York, Pres.; Dr. W. J. Engel, 2020 E. 93rd St., Cleveland 6, Secy.

American Association of Obstetricians and Gynecologists, Hot Springs, Va., Sept. 10-12, 1959. Dr. Joe V. Meigs, Boston, Pres.; Dr. E. Stewart Taylor, University of Colorado School of Medicine, 4200 E. 9th, Denver, Secy. September meeting by invitation only.

American Cancer Society, New York, Oct. 28-29, 1959. Dr. Eugene P. Pendergrass, Philadelphia, Pres.; Mr. Granville Whittlesey, 521 West 57th St., New York 19, Secy.

American College of Allergists, Miami Beach, Feb. 28-March 5, 1960. Dr. Cecil M. Kohn, Kansas City, Pres.; Mr. Eloi Bauers, 2160 Rand Tower, Minneapolis, Executive Vice-Pres.

American College of Gastroenterology, Los Angeles, Sept. 20-26, 1959. Dr. Frank L. Borrelli, New York, Pres.; Mr. Daniel Weiss, 33 West 60th, New York 23, Executive Director.

American College of Obstetricians and Gynecologists, Cincinnati, April 3-6, 1960. Dr. John I. Brewer, Chicago, Pres.; Mr. Donald F. Richardson, P. O. Box 749, Chicago 90, Executive Secy.

American College of Physicians. Dr. Dwight L. Wilbur, San Francisco, Pres.; Mr. E. R. Loveland, 4200 Pine, Philadelphia 4, Secy.

American College of Radiology, New Orleans, Feb. 3-6, 1960. Dr. Lawrence Reynolds, 10 Peterboro, Detroit, Pres.; Mr. W. C. Stronach, 20 N. Wacker Dr., Chicago 6, Executive Director.

American College of Surgeons, Atlantic City, Sept. 28-Oct. 2, 1959. Dr. Newell W. Philpott, Montreal, Pres.; Dr. Michael L. Mason, 40 E. Erie, Chicago 11, Secy.

American Congress of Physical Medicine and Rehabilitation, Minneapolis, Aug. 30-Sept. 4, 1959. Dr. Arthur C. Jones, Portland, Ore., Pres.; Dorothea C. Augustin, 30 N. Michigan Ave., Chicago 2, Executive Secy.

American Heart Association, Philadelphia, Oct. 26-27, 1959. Dr. Francis L. Chamberlain, San Francisco, Pres.; Mr. William F. McGlone, 44 E. 23rd, New York 10, Secy.

American Hospital Association, New York, Aug. 24-27, 1959. Mr. Tol Terrell, San Angelo, Pres.; Dr. Edwin L. Crosby, 810 N. Lake Drive, Executive Director.

American Laryngological, Rhinological, and Otological Society, Miami Beach, March 15-17, 1960. Dr. Theodore E. Walsh, St. Louis, Pres.; Dr. C. S. Nash, 708 Medical Arts Bldg., Rochester, N. Y., Secy.

American Psychiatric Association. Dr. Francis J. Gerty, Chicago, Pres.; Dr. C. H. Hardin Branch, 156 Westminister Ave., Salt Lake City, Secy.

American Public Health Association, Atlantic City, Oct. 19-23, 1959. Dr. Leona Baumgartner, New York, Pres.; Dr. Berwyn F. Mattison, 1790 Broadway, New York 19, Executive Secy.

American Society of Anesthesiologists, Bal Harbour, Fla., Oct. 5-9, 1959. Dr. Daniel C. Moore, Seattle, Pres.; Dr. J. E. Remlinger, Jr., 188 W. Randolph, Chicago 1, Secy.

American Society of Clinical Pathologists, Chicago, Sept. 7-11, 1959. Dr. Edward L. Burns, Toledo, Pres.; Mr. Claude E. Wells, 2052 N. Orleans, Chicago 14, Executive Secy.

American Surgical Association. Dr. I. S. Ravdin, Philadelphia, Pres.; Dr. William Altemeier, Cincinnati General Hospital, Cincinnati 29, Secy.

American Urological Association. Dr. Adolph Kutzmann, Los Angeles, Pres.; Dr. Samuel L. Raines, 188 S. Bellevue Blvd., Memphis, Tenn., Secy.

Association of American Physicians and Surgeons, St. Louis, Sept. 29-Oct. 1, 1960. Dr. Louis Wegryn, Elizabeth, N. J., Pres.; Mr. Harry E. Northam, 185 N. Wabash Ave., Chicago 1, Executive Director.

International College of Surgeons, U. S. Chapter, Chicago, Sept. 13-17, 1959. Dr. Edward L. Compere, Chicago, Pres.; Mr. Ross T. McIntire, 1516 Lake Shore Dr., Chicago, Executive Director.

Radiological Society of North America, Chicago, Nov. 15-20, 1959. Dr. Lawrence L. Robbins, Boston, Pres.; Dr. Donald S. Childs, 713 E. Genesee, Syracuse 2, N.Y., Secy.

South Central Association of Blood Banks, Albuquerque, March or April, 1960. Dr. John B. Alsever, Phoenix, Pres.; L. Ruth Guy, Ph.D., Room 1101, Stoneleigh Hotel, Dallas, Secy.

Southern Medical Association, Atlanta, Ga., Nov. 16-19, 1959. Dr. Milford O. Rouse, Dallas, Pres.; Mr. V. O. Foster, 2601 Highland Avenue, Birmingham 5, Executive Secy.

Southern Psychiatric Association, Dallas, Oct. 4-6, 1959. Dr. J. L. Knapp, Dallas, Pres.; Dr. Richard Proctor, Winston-Salem, N. C., Secy.

Southern Surgical Association, Hot Springs, Va., Dec. 8-10, 1959. Dr. George C. Finney, Baltimore, Pres.; Dr. John D. Martin, Jr., Emory University, Ga., Secy.

Southwest Allergy Forum, Oklahoma City, 1960. Dr. Richard L. Etter, Houston, Pres.; Dr. Richard H. Jackson, 156 Hermann Professional Building, Houston, Secy.

Southwest Regional Cancer Conference, Fort Worth, Sept. 20, 1959. Dr. W. S. Lorimer, Jr., Fort Worth, Chm.; Mrs. Ira Frances Ball, 264 W. 11th, Fort Worth, Secy.

Southwestern Medical Association, Roswell, N. Mex., Oct.-Nov., 1959. Dr. A. R. Clausen, Albuquerque, Pres.; Dr. M. D. Thomas, 1501 Arizona St., 12-D, El Paso, Secy.

Southwestern Society of Nuclear Medicine, New Orleans, March 14-15, 1960. Dr. Herbert C. Allen, Jr., Houston, Pres.; Dr. J. R. Maxfield, Jr., 2711 Oak Lawn Avenue, Dallas, Secy.

Southwestern Surgical Congress. Dr. Fred H. Krock, Little Rock, Pres.; Mary O'Leary, 813 Medical Arts Bldg., Oklahoma City, Exec. Secy.

Tri-State Medical Assembly, Shreveport, La., Oct. 2-3, 1959. Dr. R. B. Langford, Shreveport, Pres.; Dr. J. W. Wilson, Jr., 940 Margaret Place, Shreveport, Secy.

United States-Mexico Border Public Health Association, Hermosillo, Sonora, Mex., April, 1960. Dr. Henry A. Holle, Austin, Pres.; Dr. Jorge Román, 243 United States Court House, El Paso, Secy.

State

Private Clinics and Hospitals Association of Texas. Dr. Jack S. Maxfield, Dallas, Pres.; Mr. J. J. George, Philips-Dupre Hospital, Levelland, Executive Secy.

Texas Academy of General Practice, Galveston, Oct. 4-7, 1959. Dr. Charles E. Oswalt, Jr., Fort Stockton, Pres.; Mr. Donald C. Jackson, 1905 N. Lamar, Austin, Executive Secy.

Texas Academy of Internal Medicine, San Antonio, Dec. 4-5, 1959. Dr. Merton M. Minter, San Antonio, Pres.; Dr. Hugo T. Engelhardt, 1216 Main, Houston, Secy. Meetings restricted to members.

Texas Air-Medics Association, Fort Worth, April 9-11, 1960. Dr. W. W. Sumner, Fort Worth, Pres.; Dr. C. F. Miller, P. O. Box 1338, Waco, Secy.

Texas Association for Mental Health, Austin, 1960. Paul Southern, Ph.D., Abilene, Pres.; Mr. John Lane, 2410 San Antonio, Austin, Executive Director.

Texas Association of Obstetricians and Gynecologists, Austin, February, 1960. Dr. Maurice Meynier, Houston, Pres.; Dr. Hugh W. Savage, 815 Fifth Ave., Fort Worth, Secy.

Texas Chapter, American Association of Public Health Physicians, Fort Worth, April 10, 1960. Dr. Fred K. Laurentz, Houston, Pres.; Dr. B. M. Primer, 2708 Rio Grande, Austin, Secy.

Texas Chapter, American College of Chest Physicians, Fort Worth, April 10, 1960. Dr. L. M. Shefts, San Antonio, Pres.; Dr. John W. Middleton, 900 Strand, Galveston, Secy.

Texas Club of Internists. Dr. D. D. Warren, Waco, Pres.; Dr. L. C. Carter, 2600 Procter, Port Arthur, Secy.

Texas Dermatological Society, Fort Worth, April 11, 1960. Dr. Edmund N. Walsh, Fort Worth, Pres.; Dr. D. Shelton Blair, 1609 Medical Arts Building, Dallas, Secy.

Texas Division, American Cancer Society, Austin, Dec., 1959. Dr. John A. Wall, Houston, Pres.; Mr. Curt W. Reimann, 5014 Bull Creek Rd., Austin 3, Executive Director.

Texas Diabetes Association, Fort Worth, April 10, 1960. Dr. Ralph Greenlee, Midland, Pres.; Dr. Warren W. Moorman, 901 W. Leuda, Fort Worth, Secy.

Texas Heart Association, Fort Worth, April 9-10, 1960. Dr. Robert E. Leslie, El Campo, Pres.; Mr. Ernest T. Guy, 404 Jesse H. Jones Library Building, Houston 25, Executive Director.

Texas Industrial Medical Association, Fort Worth, April 10, 1960. Dr. Max E. Johnson, San Antonio, Pres.; Dr. J. G. Burdick, P. O. Box 472, Pasadena, Secy.

Texas Neuropsychiatric Association, Fort Worth, April 10, 1960. Dr. Hamilton Ford, Galveston, Pres.; Dr. E. Ivan Bruce, 1014 Strand, Galveston, Secy.

Texas Ophthalmological Association, Fort Worth, April 11-12, 1960. Dr. Max Baldridge, Texarkana, Pres.; Dr. James H. Scruggs, 2223 Austin Ave., Waco, Secy.

Texas Orthopedic Association. Dr. Louis J. Levy, Fort Worth, Pres.; Dr. Margaret Watkins, 3503 Fairmount, Dallas, Secy.

Texas Pediatric Society, Houston, September or October, 1959. Dr. Bruce A. Knickerbocker, Dallas, Pres.; Dr. James N. Walker, 5216 W. Freeway, Fort Worth, Secy.

Texas Physical Medicine and Rehabilitation Society. Dr. Vann S. Taylor, Dallas, Pres.; Dr. Lewis A. Leavitt, Veterans Administration Hospital, Houston, Secy.

Texas Proctologic Society, Dallas, February, 1960. Dr. Alvin Baldwin, Dallas, Pres.; Dr. H. Gray Carter, 915 St. Joseph St., Dallas, Secy.

Texas Public Health Association. Mr. Tom Warren, Austin, Pres.; Mr. Joseph N. Murphy, Jr., Box 4012, Austin 51, Executive Secy.

Texas Radiological Society, Houston, January, 1960. Dr. Herman C. Sehested, Fort Worth, Pres.; Dr. R. P. O'Bannon, 1216 Pennsylvania, Fort Worth, Secy.

Texas Rheumatism Association, San Antonio, Dec. 4, 1959. Dr. Warren W. Moorman, Fort Worth, Pres.; Dr. J. Morris Horn, 3707 Gaston, Dallas, Secy.

Texas Society of Anesthesiologists, Fort Worth, April 10, 1960. Dr. David O. Johnson, Austin, Pres.; Dr. M. T. Jenkins, Parkland Hospital, Dallas, Secy.

Texas Society of Athletic Team Physicians, Fort Worth, April 9, 1960. Dr. William H. Ledbetter, Wichita Falls, Pres.; Dr. Jack Brannon, 2715 Fannin, Houston, Secy.

Texas Society of Gastroenterologists and Proctologists, Fort Worth, April 10, 1960. Dr. Marcel Patterson, Galveston, Pres.; Dr. A. C. Broders, Jr., Scott and White Clinic, Temple, Secy.

Texas Society on Aging, Dallas, Oct. 16-17, 1959. Mr. Herbert Shore, Dallas, Pres.; Mrs. William B. Ruggles, 3701 Stratford, Dallas, Secy.-Treas.

Texas Society of Ophthalmology and Otolaryngology, Fort Worth, Dec. 4-5, 1959. Dr. James T. Robison, Austin, Pres.; Dr. Edwin G. Grafton, 4319 Oak Lawn, Dallas, Secy.

Texas Society of Pathologists, Inc. Dr. Jarrett Williams, Abilene, Pres.; Dr. Sylvia Johns, 414 Navarro St., San Antonio, Secy.

Texas Society of Plastic Surgeons. Dr. Baron Hardy, Houston, Pres.; Dr. Raymond Brauer, 6615 Travis, Houston, Secy.

Texas Surgical Society. Dr. Albert Hartman, San Antonio, Pres.; Dr. G. V. Brindley, Jr., Scott and White Clinic, Temple, Secy.

Texas Traumatic Surgical Society, Fort Worth, April 10, 1960. Dr. W. D. Marrs, Fort Worth, Pres.; Dr. W. E. Crump, 1300 8th St., Wichita Falls, Secy.

Texas Tuberculosis Association, Abilene, March, 1960. Mr. Zeb Rike, McAllen, Pres.; Miss Pansy Nichols, P. O. Box 6158, Austin 21, Executive Director.

Texas Urological Society, Waco, January, 1960. Dr. William Heck, San Antonio, Pres.; Dr. Moreton A. Magid, 1525 Colcord Ave., Waco, Secy.

District

First District Society. Dr. H. D. Garrett, El Paso, Pres.; Dr. E. S. Crossett, 1501 Arizona St., El Paso, Secy.

Second District Society, Lamesa. Dr. Oscar E. Rhode, Colorado City, Pres.; Dr. John H. Chinn, Jr., Colorado City, Secy.

Third District Society, Lubbock, 1960. Dr. Grady M. Wallace, Lubbock, Pres.; Dr. H. Fred Johnson, 2308 W. Eighth, Amarillo, Secy.

Fourth District Society, San Angelo, May 16, 1959. Dr. W. L. Smith, San Angelo, Pres.; Dr. S. Braswell Locker, 1501 11th St., Brownwood, Secy.

Fifth and Sixth Districts Society, Corpus Christi, July 10-11, 1959. Dr. O. L. Riley, Corpus Christi, Pres.; Dr. Thelma Frank, 1314 16th St., Corpus Christi, Secy.

Seventh District Society. Dr. Robert N. Snider, Austin, Pres.; Dr. Richard Lucas, 502 W. 13, Austin, Secy.

Eighth District Society, Victoria. Dr. Joseph Magliolo, Dickinson, Pres.; Dr. M. Warren Hardwick, 829 E. Mulberry, Angleton, Secy.

Ninth District Society, Brenham, 1960. Dr. Haden E. McKay, Humble, Pres.; Dr. Lyman C. Blair, 1212 Rothwell, Houston, Secy.

Tenth District Society, Beaumont, 1959. Dr. Albert L. Delaney, Liberty, Pres.; Dr. Irving M. Richman, 3280 Fannin St., Beaumont, Secy.

Eleventh District Society, Palestine, Sept. 9, 1959. Dr. Ben Wilson, Tyler, Pres.; Dr. Phillip W. Taylor, 833 S. Beckham, Tyler, Secy.

Twelfth District Society, A&M College, July 4, 1959. Dr. Paul H. Mitchell, Corsicana, Pres.; Dr. J. M. Brown, Torbett Clinic, Marlin, Secy.

Thirteenth District Society. Dr. W. R. Sibley, Abilene, Pres.; Dr. R. D. Moreton, 1217 W. Cannon, Fort Worth, Secy.

Fifteenth District Society. Dr. Charles Wise, Naples, Pres.; Dr. George Bennett, 402 S. Bolivar, Marshall, Secy.

Clinics

Blackford Memorial Cancer Lectures, Denison, Nov. 3, 1959 (tentative). Dr. R. G. Gerard, 509 S. Mirick, Denison, Chm.

Dallas Southern Clinical Society, Dallas, March 21-23, 1960. Dr. T. Haynes Harvill, Dallas, Pres.; Millard J. Heath, 433 Medical Arts Bldg., Dallas 1, Executive Officer.

International Medical Assembly of Southwest Texas, San Antonio, Jan. 25-27, 1960. Dr. Alvin O. Severance, San Antonio, Pres.; S. E. Cockrell, 202 W. French Place, San Antonio, Exec. Secy.

New Orleans Graduate Medical Assembly. Dr. Jo Weilbaecher, New Orleans, Pres.; Mrs. Irma B. Sherwood, 430 Tulane Ave., New Orleans 12, Executive Secy.

North Texas-Southern Oklahoma Fall Clinical Conference, Wichita Falls, Aug. 22, 1959. Dr. Frank J. Lee, 1300 8th, Wichita Falls, Chm.

Oklahoma City Clinical Society Conference, Oklahoma City, Oct. 26-28, 1959. Dr. Ralph A. Smith, Oklahoma City, Pres.; Miss Alma F. O'Donnell, 503 Medical Arts Bldg., Oklahoma City 2, Executive Secy.

Postgraduate Medical Assembly of South Texas, Houston, July 20-22, 1959. Dr. Herbert H. Harris, Houston, Pres.; Dr. C. Forrest Jorns, Secy., Exec. Office, 412 Jesse Jones Library Bldg., Houston 25.

Board Examinations

Texas State Board of Examiners in Basic Sciences. Henry B. Hardt, Ph.D., Fort Worth, Pres.; Mrs. Betty J. Anderson, Chief Clerk, 303 East Seventh, Austin.

MEDICAL MEETINGS

Mental Health Attendance Record Set

Paul Southern of Abilene, Ph.D., chairman of the Department of Bible and Religious Education at Abilene Christian College, was elected president of the Texas Association for Mental Health when that group held its twenty-sixth annual conference in Fort Worth March 12-14.

Chosen to serve with him were William R. Ransone of Dallas, president-elect; George Markins of Houston, first vice-president; Mrs. Bryan Bradbury of Abilene, second vice-president; Mrs. Charles G. Pratt of Fort Worth, secretary; and Dennis Macken of Austin, treasurer.

Convention attendance hit an all-time high when more than 800 persons attended an open meeting to hear Dr. Paul Popenoe, Los Angeles, discuss "Personality Development and the Family." Speeches, films, panel discussions, exhibits, and social events were included in the convention program.

Planning committee members included Dr. A. J. Bankhead, Jr. of Tyler and Dr. Edgar Ezell of Fort Worth.

Denver Cancer Conference Speakers

Seven guest speakers will be presented when the Rocky Mountain Cancer Conference is held July 22-23 at the Brown Palace Hotel in Denver, a meeting which falls during the Colorado centennial celebration.

The guest speakers will be Dr. J. Garrott Allen of Chicago, surgeon; Dr. Benjamin Castleman of Boston, pathologist; Dr. James R. Heller, director of the National Cancer Institute in Bethesda, Md.; Dr. Louis T. Orr of Orlando, urologist; Dr. Walter L. Palmer of Chicago, internist; Dr. Eugene Pendergrass of Philadelphia, radiologist; and Dr. Edward H. Reinhard of St. Louis, internist.

Further information is available from Dr. N. Paul Isbell, convention chairman, 835 Republic Building, Denver 2.

Alcohol Institute Slated June 21-26

A faculty of alcoholism authorities will be on hand when the second annual Institute on Alcohol Studies is held at the University of Texas June 21-26.

The group includes: Dr. Paul Stevenson, consultant on alcoholism with the National Institute of Mental Health; Dr. Jackson A. Smith, member of the American Medical Association's six man Committee on Alcoholism; Dr. R. G. Bell, medical director of Bell Clinic in Ontario and chairman of the Committee on Alcoholism of the Industrial Medical Association; Mrs. Marty Mann, founder and executive director of the National Council on Alcoholism; Dave Meharg, head of the Dupont Company's industrial alcoholism program, considered best in the country; and the Rev. Robert Regan of the Washington, D. C., Methodist Church, who has been prominent in the interdenominational approach to this problem.

Persons desiring an advance program or registration information may write to the Institute, 1501 Guadalupe, Austin 1.

Yale Slates Alcohol Studies

"Public Health Aspects of Alcoholism," an interdisciplinary study of problems of alcohol and alcoholism as they involve principles and practices in public health, will be presented when the Summer School of Alcohol Studies of the Laboratory of Applied Biodynamics, Yale University, holds its seventeenth annual session June 28-July 23.

A fee of $275 covers University registration, tuition, room and board (except Sunday meals). For a prospectus on the course, address the registrar, 52 Hillhouse Avenue, Yale Station, New Haven, Conn.

Ear Conference Transcripts Available

A transcript of the first joint conference among the professions and commercial elements serving the hard-of-hearing is now available to interested persons, the Hearing Aid Industry Conference, sponsor, has announced. Represented at the February session were the American Academy of Ophthalmology and Otolaryngology, the American Hearing Society, the New York League for the Hard of Hearing, the Bureau of Medical Rehabilitation of the New York State Department of Health, the Society of Hearing Aid Audiologists, and the HAIC.

Requests for transcripts should be made to the HAIC, 2900 West 36th Street, Chicago. The supply is limited, and requests will be honored on basis of date of receipt, one transcript per request.

Goiter Group to Give Travel Grants

The fourth International Goiter Conference will be held July 5-9, 1960, in London, England, under auspices of the London Thyroid Club and the American Goiter Association. The latter group will make available to worthy candidates a limited number of travel grants for participants in this meeting. Applications will be received until January 1, 1960, and blanks should be requested from Dr. John C. McClintock, 149½ Washington Avenue, Albany 10, N. Y.

Mental Retardation Conference Topic

The first International Medical Conference on Mental Retardation will be held in Portland, Maine, July 27-31, with a group of speakers from England, Germany, the United States, France, Austria, and Denmark.

Registration fee is $10. Communications should be addressed to the conference secretary, International Medical Conference on Mental Retardation, c/o Division of Maternal and Child Health, State House, Augusta, Maine.

DRUG NOTES

New Drug May Lead to Agent Against Systemic Mycoses

GRIFULVIN (McNeil) is being tested clinically and is not yet available. The drug is being supplied for clinical investigation in scored, green tablets of 125 mg. each. The generic name is griseofulvin. Schering also is working with this compound.

This compound may be the stepping stone to a new series of agents. We long have had need for an effective wide range agent useful against systemic mycoses. Whereas Grifulvin does not appear to be wide range, except for superficial mycoses, it eventually may point the way to other more effective agents.

Griseofulvin is a fermentation product of three species of Penicillium and has low oral toxicity. It may be useful in certain mycotic infections, especially of the nails and hair. Guinea pigs infected experimentally with Microsporum canis were treated with 60 mg. per kilogram of body weight orally. Improvement was detected within 4 days.

Similar results were obtained with Trichophyton mentagrophytes and T. verrucosum. In vitro, the drug has been shown to be active against all common dermatophytes. It is believed to be ineffective against Monilia and Blastomyces and other causes of deep mycoses. It is thought that the griseofulvin makes the keratin resistant to the invasion of the dermatophyte.

IONAL (Strasenburgh) is another addition to the family of resin complex preparations. It is not yet available. It is a codeine methylorthotolyquinazalone resin complex. A long acting analgesic, it is effective for about 12 hours.

DBI (Phenformin) (U. S. Vitamin). The orally effective antidiabetic drug we have been expecting for some time probably will be available about the time this is printed. Good to excellent results have been obtained in a limited number of children under 14 years of age. The drug has been found to be effective in the adult stable type of diabetics and useful in the treatment of juveniles and instable diabetics and those with reactions to insulin. The dosage is 100 mg. daily for minimal side effects, and may be given in conjunction with insulin.

METAHEXAMIDE (Lilly), another new antidiabetic drug, also will be available soon. This drug has been tried clinically in more than 4,000 diabetic patients. Its dose ranges from 50 mg. to 200 mg. Research is continuing for further, orally effective antidiabetic drugs.

ROBUDEN (Crookes-Barnes), a tissue extract still under investigation and not yet available in the United States, is being tried in the management of gastric and duodenal ulcers. The product is available by Robapharm in Europe, Canada, and South America.

The product can be given by deep gluteal injection, 1 ml. every other day, or in the form of 200 mg. tablets, three times a day before meals for 60 days, followed by a reduction to a maintenance dose of 1 tablet three times before meals for the first 10 days of each month.

The advantages of Robuden are said to be rapid relief of pain without rigid diet, diminution in incidence of relapse with a high percentage of healing.

The mode of action is not yet clear. Further information as to the exact nature of the extract, its source and makeup was not available immediately at this writing.

TRIMEGLAMIDE (Riker) is still in the experimental stage and is not yet available. This drug should be useful as a daytime sedative and a night time hypnotic without hangover.

In clinical trial 250 mg. tablets are being used in the treatment of tension and anxiety states and insomnia. The drug, a mild central nervous system depressant, is said to produce a sense of well-being and relaxation. It is said to be nonhabit-forming. Large doses are said not to produce deep hypnosis or anesthesia. The drug is suggested, too, in the treatment of grand mal epilepsy, as an aid in general anesthesia, and also as an aid in the recording of the electroencephalogram.

Two to 6 tablets daily have been given in nervous tension and anxiety states. The dosage appears to be related to the intensity of the stress. Two or 3 tablets a day may give the desired results. The dose for children does not appear to be less than for adults.

Results using animals show no neurological involvement nor prehypnotic ataxia. The animals are easily aroused. A dose 10 times that of the minimum hypnotic dose is not toxic and does not augment the hypnotic effect. No tolerance was demonstrated in dogs after 9 months of continuous daily administration.

ERGOMAR (Nordson) is a sublingual tablet useful in the treatment of migraine. The tablet dissolves within 30 to 60 seconds and is absorbed into the blood stream within 10 to 15 minutes. Each sublingual tablet contains 2 mg. of ergotamine tartrate. One tablet is placed under the tongue at the first sign of an attack and may be repeated every half hour, but not to exceed 3 tablets in any 24 hour period.

—HERBERT SCHWARTZ, M.S., Austin.

MEDICOLEGAL NOTES

Patients May Donate Bodies As Result of New Act

As a result of the passage of the "tissue bill" on March 4, physicians now will be able to give an affirmative answer to patients inquiring if it is legally possible to donate their body or parts of it. The bill was signed by the Governor on April 8, is now in effect, and is a law.

Briefly, for background purposes, our Texas laws were not conducive to an individual bequeathing his body. The main reason for this was the confused state of the law in this area and the definite possibility that the heirs could, and on occasions did, overrule and nullify the bequest. Consequently, physicians were reluctant, and wisely so, in attempting to carry out the patient's request.

The passage of this "tissue bill" now gives legal status to the idea that an inhabitant of this state, of legal age, does have a right to dispose of his own body for two purposes—namely: for advancing medical science or for replacement or rehabilitation of diseased or worn-out organs, members, or parts of bodies of living humans. He can specify the whole body or the particular part or parts he wishes to donate. He can even list the name of his donee.

If a donee is not specifically listed and the patient dies in a hospital, then the hospital is considered the donee. Should the patient die elsewhere and he has not listed a donee, then the attending physician is considered the donee and may proceed in carrying out the deceased's wishes. Where no donee is listed, and depending on where the person dies, the physician and/or hosiptal has full authority to take and remove the body, organs, or whatever is speci-

fied in the written bequest and to make it available to any person or institution in need of it.

Of course, if the patient has designated a donee, then any duly licensed physician acquiring possession or custody of the body has the authority to remove the body or parts designated and deliver them to the donee.

It is obvious that the physician now will play an even greater role in the research and transplant fields. Too, the bequest does not have to be included in the patient's will. It can be, but since time is often important in the taking and replacing of certain tissues or organs, a simple instrument executed by the patient prior to death will suffice. For example:

"Upon my death, I hereby will, give, bequeath, and donate my_____to_____
(specify body or part of body) (individual, hospital,
_____for the purpose of advancing
institution, bank, or can be left blank)
medical science, or for the replacement or rehabilitation of diseased or worn-out organs, members, or parts of living persons.

/signed/_____

_____

_____

(signature of 2 witnesses of legal age)"

To insure further that the donor's intentions are carried out, the patient should be encouraged to execute several copies of the instrument, making copies available to the donee (if other than his physician) and the donor's physician. This would be extremely important in the event certain tissues were to be transplanted.

Physicians and hospitals are not held liable, civilly or criminally, for removing organs or any part from the body provided the donor, prior to death, has executed a valid written agreement. The sample agreement suggested here is in keeping with the terms of what shall constitute a valid agreement—mainly that the instrument convey the clear intention of the person making it. Too, no appointment of an administrator, executor, or court order is necessary before the removal of the specified organs.

The law, as enacted, does provide that the donor can change his mind and revoke the instrument disposing of his body. All that is required here would be to execute a simple written instrument in the same or a similar manner as the original donation was made.

It is believed that this law, because of its content and simplicity, will be of great interest to the medical profession of this State in achieving the goal of a longer and healthier life for its citizens.

—PHILIP R. OVERTON, LL.B., Austin.

Standing on Health Legislation

As the regular session of the Texas Legislature neared its close, several medical and health bills were moving—some as far as the Governor's signature.

The "tissue" bill (H.B. 264), providing for the donation and bequest of human bodies and organs, members, and parts thereof for the purpose of advancing medical science or for replacement or rehabilitation of diseased or wornout parts of living human beings; the "Blue Cross" bill (S.B. 158-H.B. 395), modernizing the law pertaining to nonprofit corporations primarily relating to investment regulations; and the hospital licensing bill (H.B. 204-S.B. 121), emphasizing safety, fire prevention, and sanitation, had passed both houses. The bill providing for a University of Texas medical school in Bexar County had been signed by the Governor.

The Texas Tuberculosis Code (H.B. 421), which would recodify existing statutes and provide for care of indigent persons suffering from tuberculosis and treatment of patients refusing care, had passed the House of Representatives. There seemed hope of passage in the Senate before time ran out.

The "dangerous drug" bill (S.B. 124), regulating the possession, handling sale, obtaining, and distribution of "dangerous drugs" while providing for persons to receive them under medical supervision, and the pharmacy amendments (S.B. 123) to provide for better enforcement of existing laws relating to the regulation and practice of pharmacy, had passed the House. Action of some sort in the Senate was expected.

EDUCATION

Postgraduate Courses

Mycobacterial Disease, Dallas, May 22-23.—The University of Texas Southwestern Medical School in association with the Dallas Tuberculosis Association is sponsoring this Ivan H. Mattson Memorial Postgraduate Conference at Southwestern Medical School. Fourteen hours of credit will be given to members of the Academy of General Practice. Registration fee is $15, with complimentary enrollment for interns and residents. Registration may be made with the Executive Director, Dallas Tuberculosis Association, 3925 Maple Avenue, Dallas 19.

Fetal Electrocardiography, Los Angeles, June 5-6.—The University of California School of Medicine and University Extension Division will sponsor this course, with Sol D. Larks, Ph.D., assistant professor of biophysics, chairman. The program is designed to offer intensive instruction in technique and interpretation of the fetal electrocardiogram and to equip the obstetrician and general practitioner, as well as others, with the ability to record and understand the varied information provided by it. Theory and practical recording technique will be presented. Tuition fee: $40.

Office Urology, Los Angeles, June 17.—This one day course is offered by the University of California School of Medicine and University Extension Division, with Dr. Roderick D. Turner as chairman. Common urological problems encountered in everyday office practice will be discussed. Tuition fee: $30. Applications should be mailed to Department K, University Extension, University of California, Los Angeles 24. Checks should be made payable to the Regents of the University.

Surgical Technique Utilizing the Isolated Intestinal Segment in Urological Procedures, Los Angeles, June 18.—Sponsored by the University of California School of Medicine and the University Extension Division, this course is designed for the surgeon who wishes to perfect his technique. The instructional staff will demonstrate with the participant as first assistant; the operation will be repeated with student as surgeon and demonstrator as assistant. Dr. Roderick D. Turner is chairman. Enrollment is limited to 14 students; tuition fee is $150. Information is available from Dr. Thomas H. Sternberg, assistant dean for postgraduate medical education.

University of Texas Medical Branch

Dr. Harriet Felton, professor of pediatrics at the University of Texas Medical Branch, has been named by Gov-

ernor Price Daniel to the 118 member Texas Committee for the 1960 White House Conference on Children and Youth. Such a White House conference is held every 10 years.

Dr. Robert W. Wissler, professor of pathology and chairman of the department, University of Chicago, discussed "The Cellular Origin of Antibodies" as Sigma Xi lecturer recently at the University of Texas Medical Branch.

The Medical Branch was host to *Sir John and Lady Eccles* March 4-8. Sir John, professor of physiology, John Curtin School of Medical Research, Australian National University, Canberra, gave a Squibb Centennial Lecture on March 6.

Cerebral vascular surgery was the subject of *Dr. W. B. Hamby,* professor of neurosurgery, University of Buffalo, when he appeared as James Greenwood lecturer of the year.

Drs. Edgar J. Poth and *Truman G. Blocker, Jr.* took part in the sectional meeting of the American College of Surgeons in St. Louis March 9-12, while *Dr. W. P. Wilson,* director of psychiatric research, and *Drs. Frank Gill* and *L. William Schleuse,* residents in neuropsychiatry, presented papers at a February regional research meeting in Little Rock.

Alpha Kappa Chapter, Phi Beta Pi medical fraternity, will be host to the thirty-third national convention of that organization at Galveston June 25-27.

Dr. H. K. Ezell, Jr., senior scientist, Oak Ridge Institute of Nuclear Studies, gave a special lecture on "Biologic Low-Level Counting Techniques for Carbon-14" on April 8.

Dr. Joseph E. Hawkins, Jr., a Rhodes Scholar who is an associate professor of otorhinolaryngology at the New York University Post-Graduate Medical School, gave the April 7 McLaughlin Lecture, selecting as his topic, "The Ototoxicity Problem: From Quinine to Kanamycin."

The National Heart Institute has made a 5 year grant of $250,000 to the Medical Branch for a new residency training program in the Department of Medicine. The program will be directed by Dr. James V. Warren.

The National Institutes of Health have provided a $25,000 a year grant for 5 years for experimental research training of students at the Medical Branch.

Dr. Pruitt to Become Chairman Of Baylor Department of Medicine

Dr. Raymond D. Pruitt of Rochester, Minn., has been appointed professor of medicine and chairman of the Department of Medicine at Baylor University College of Medicine, Houston, Dr. Stanley W. Olson, dean, has announced. Dr. Pruitt will assume his duties July 15.

He has been professor of medicine and chief of medicine for medical education at Mayo Foundation, Division of the Graduate School of the University of Minnesota. A native of Wheaton, Minn., Dr. Pruitt received his bachelor of science degree from Baker University; bachelor of arts degree from Oxford University, which he attended as a Rhodes Scholar; doctor of medicine degree from Kansas University; master of science in medicine degree from the University of Minnesota; and honorary doctor of science degree from Baker University.

Dr. Pruitt has served the Mayo Foundation since 1940, and has been a consulting physician at the Mayo Clinic since 1943. He is certified by the American Board of Internal Medicine and is a diplomate and secretary of the American Board of Cardiovascular Disease. He is a member of Alpha Omega Alpha national honorary medical fraternity; Central Society for Clinical Research; Sigma Xi national honorary scientific society; Minnesota Medical Foundation, of which he is a trustee; American Heart Association; and American College of Chest Physicians. Dr. Pruitt has published extensively on cardiovascular aspects of medicine, including his own studies in experimental electrocardiography.

44 Foreign Exam Centers Now Functioning for Education Council

More than 1,000 foreign-trained physicians have already registered for the next qualifying examination of the Education Council for Foreign Medical Graduates which is slated for September 22, 1959. Only 298 took the first examination in March, 1958.

Co-sponsors of the educational council include the American Medical Association, American Hospital Association, Association of American Medical Colleges, and Federation of State Medical Boards of the United States.

Headquartered in Evanston, Ill., the council aids graduates of foreign medical schools in establishing their qualification to assume internships or residencies in United States hospitals. Forty-four examination centers have now been set up in foreign countries, ranging from 15 in Latin America to 1 in Africa. An inadequate command of the English language ranks as the chief reason for failure in the exams in some of the foreign centers.

Texans Receive Heart Funds

Four Texas physicians were among 182 scientists who were awarded a total of $1,500,000 recently by the American Heart Association to carry on basic research studies.

The Texans were Dr. James B. Gilbert, Clayton Foundation, Biochemical Institute, University of Texas, Austin, for a study of enzymes; Dr. Burton Combes, University of Texas Southwestern Medical School, Dallas, for a study of liver functions and its influence on the blood; Dr. Walter S. Henly, Baylor University College of Medicine, Houston, for a study of employing radioactive iodine to determine the quantity of blood flowing through the coronary arteries of the heart muscle; and Dr. Ivan E. Cushing, Jr., University of Texas Southwestern Medical School, Dallas, for a study on assisted respiration and air flow in and out of the lungs.

Neurophysiology Grants Announced

Funds are now available for basic or clinical research in neurophysiology, the Dysautonomia Association has announced. The association will support research related to the clinical entity known as familial dysautonomia, as well as any type of study that might lead to a better understanding of nervous system functions at a basic level as a stepping stone to the understanding of a disease process.

All requests for grants will be submitted by the association to its medical advisory board for evaluation. Interested persons may write the association president, Harold M. Newman, Dysautonomia Association, 2 West 46th Street, New York 19.

Personals

The Texas Tuberculosis Association has elected two physicians to its current slate of officers. They are *Dr. Henry R. Hoskins,* San Antonio, vice-president and *Dr. Z. T. Scott,* Austin, treasurer. *Dr. J. Edward Johnson* of Austin is the president-elect of the organization.

Dr. Roy H. Morris, Jr. of Elgin has been elected president of the Elgin Board of Education.

Dr. Harry T. Davidson, Austin, is concluding his second term as exalted ruler of the Austin Elks Club, which built a new clubhouse during his administration.

Dr. Roy C. Noble, Rusk State Hospital staff physician, is visiting three mental institutions in New York and Pennsylvania to study the technique of remotivation, while *Mrs. Edith Ray Vick,* director of the Rusk nursing service, has returned recently from Spring Grove State Hospital, Baltimore, where she has been observing that hospital's training program. Both studies were made possible by in-service training grants from the Southern Regional Education Board.

Two Texas doctors were among three winners of a surgical essay contest held by the Southwestern Surgical Congress during its eleventh annual meeting in Denver early in April. They are *Dr. John B. Lynch* of the University of Texas Medical Branch, Galveston, who received $300 for his paper on "Pancreatic Function Studies in Chronic Biliary Disease," and *Dr. K. O. Adwan* of the University of Texas Southwestern Medical School, Dallas, who received $150 for a paper on "The Effect on Respiratory Dynamics of the Treatment of Chronic Anemia."

Dr. Andres Goth, professor of pharmacology at the University of Texas Southwestern Medical School, Dallas, discussed "The Current Trends in Pharmacological Research," before the March 18-19 Dallas County Pharmacy and Management Conference.

Dr. R. Lee Clark, Jr., director and surgeon-in-chief of the University of Texas M. D. Anderson Hospital and Tumor Institute, Houston, has received a 5 year appointment as chairman of the Committee on Cancer of the American College of Surgeons. The appointment is effective September 27, 1959.

"Clinical Pediatric Allergy" was the topic of *Dr. John P. McGovern,* Houston, when he appeared on the scientific program during the spring session of the American Academy of Pediatrics in San Francisco April 13-15.

Participating in the first annual Idaho Cancer Conference of the American Cancer Society in Boise April 10-11 was *Dr. John A. Wall,* Houston, who discussed "Diagnosis and Treatment of Cancer of the Uterus."

Dr. Tom E. Smith, Dallas, was recently elected governor of District 58, Rotary International.

Dr. Curtice Rosser, Dallas, will be made an honorary fellow of the International College of Surgeons in September. He is a past president of the United States Section of the college.

"Aneurysms and Occlusive Disease of the Aorta and Peripheral Arteries: Experience with 2,000 Cases" was to be the subject of a paper presented by *Dr. George C. Morris, Jr.,* Houston, during the April 19-22 annual meeting of the Iowa State Medical Society held in Des Moines.

Dr. Marvin D. Siperstein of the University of Texas Southwestern Medical School, Dallas, received the 1959 Marchman Award for outstanding achievement in research and teaching. The award is given annually by the Dallas Southern Clinical Society.

Dr. Theodore Greiner of Houston, member of the Department of Psychiatry at Baylor University College of Medicine, was the only Texan on the program when the Woods Schools presented their spring conference May 1-3 in Philadelphia on the general topic of "Methodological Approaches to Research in Mental Retardation."

Dr. Andrew Tomb, Victoria, was slated for a number of talks this spring, before such groups as the Washington Academy of General Practice, Longview, Wash.; the Nebraska Medical Association; and the American Psychiatric Association in Philadelphia.

Dr. James H. Harris of Marshall has been awarded a life membership by the Marshall Council of Parents and Teachers for outstanding services to the organization.

Fort Worth pediatrician, *Dr. Edwin G. Schwarz* has been selected as this year's honoree by the local chapter of the National Conference of Christians and Jews.

Dr. M. A. Childress and his staff have announced the formal opening on May 3 of the Childress Clinic and Hospital in Goldthwaite.

Dr. and Mrs. Milford O. Rouse, Dallas, have a granddaughter, Marianne Leaureame Sawyer, born April 25.

Dr. and Mrs. Robert E. Hill of Baytown are the parents of a new daughter.

Mrs. Lucille Herring Stromberg, wife of *Dr. Eric W. Stromberg* of Taylor, died in a local hospital on March 25 after a lengthy illness. Survivors include her husband and three sisters.

Brazil's Dr. Chagas to Be Honored

Specialists in tropical diseases from all parts of the world will gather in Rio de Janeiro, Brazil, July 5-11 to participate in the International Congress on Chagas' Disease.

Still one of the major health problems in Latin America, Chagas' disease is named after the late Dr. Carlos Chagas, who discovered it. A form of trypanosomiasis found in man and the armadillo, the disease runs an acute course in children and a chronic course in adults, but is regularly fatal.

The week long conference is being held under the auspices of the president of Brazil on the occasion of the fiftieth anniversary of Dr. Chagas' discovery. A former director of public health in Brazil, Dr. Chagas himself called the disease American trypanosomiasis.

Maintenance, Planning Manuals Available from Hospital Association

Two new publications by the American Hospital Association are now available to interested persons: the first, a "Preventive Maintenance Guide," outlining a program to extend the life of hospital equipment and buildings, to control costs, and to guarantee that equipment emergencies can be met, and the second, a "Manual of Hospital Planning Procedures," pointing the way to sound planning of hospital construction and remodeling.

Both manuals have been mailed to institutional members. Additional copies of the maintenance guide are priced at $2, the planning manual at $1.50. They may be requested from the association at 840 North Lake Shore Drive, Chicago 11.

Pharmacy Board Moves to Austin

Offices of the Texas State Board of Pharmacy were to be moved to Austin on May 15. The address is Littlefield Building, Room 914. Joe H. Arnette, formerly director of the Pharmacy Extension Service of the University of Texas, is the new executive secretary.

A Camp for Your Patient?

Camp Sweeney for diabetic boys and girls is located at Gainesville and is the only full summer and coeducational center in the South for diabetic children.

Named for its medical director, Dr. J. Shirley Sweeney of Dallas, Camp Sweeney is an outgrowth of his long-time dream to provide outdoor camping experiences for diabetic children, as well as research facilities for the study of causes, treatment, and cure of diabetes and allied metabolic disorders.

Any Texas child may attend the camp, regardless of his family's ability to pay. There are three divisions: junior, 6 to 8 years; intermediate, 9 to 12 years; and senior, 13 to 16 years. These three groups have separate living quarters, classes, team games, and special events.

Medical forums are held by Dr. Sweeney for each camping group, parents and friends being invited to attend the ones held on the second Sunday of each term.

Among the chief aims of Camp Sweeney is to teach diabetic children that they are not "ill" and that they can live normal, healthy, and happy lives. At the same time, their health is safeguarded throughout their camp stay by a staff which includes the camp medical director, two resident physicians, three registered nurses, two dieticians, Red Cross swimming instructors, and well-trained counselors.

Complete health charts are kept on each camper; all insulins are given by, or under supervision of, a graduate nurse; and children are weighed and examined daily.

Inquiries may be made to James V. Campbell, camp director, 1005 Lindsay Street, Gainesville.

Harlingen Cobalt Unit Dedicated

The Winnie Reber Memorial Cobalt Radiation Clinic of Valley Baptist Hospital in Harlingen was dedicated in a public ceremony on March 15. The $37,000 cobalt unit and the $88,000 building in which it is housed are the gift of the pioneer cattle ranching Reber family of Harlingen, in memory of a sister who died of cancer 2 years ago.

Because the nearest comparable equipment is in Houston, the cobalt clinic will serve the greater portion of south and central Texas and northern Mexico. E. C. Breedlove, chairman of the hospital board of trustees, is quoted as saying that the cobalt "bomb" will effect 10 to 40 per cent more 5 year cures than the standard methods.

Dr. Franklin W. Yeager of Corpus Christi, president-elect of the Texas Medical Association, was present for the dedication ceremonies.

Children's Center to Open In Victoria Next Year

The Devereux Foundation, which operates treatment centers for emotionally disturbed and retarded children in Pennsylvania, Maine, and California, has announced that it will open its first southwestern branch in Victoria.

January, 1960, has been set as the target date for the opening of the Victoria school, which will have a $600,000 to $800,000 physical plant and which will be located on a 300 acre tract.

About 75 to 100 children will be served by the school, with the number of staff personnel matching that of the students. Plans call for the complete Devereux method of helping alleviate childhood disturbances through therapeutic education from preschool to high school, research into the causes of such disturbances, and training of personnel to serve in that field.

Dr. George A. Constant, Victoria psychiatrist, is a Devereux trustee who helped interest the foundation in locating in the Texas city. Also instrumental in selection of a Texas site was a recent survey by the Texas Junior Leagues showing the need for a school of this type.

Operating expenses of the centers are derived from tuition fees, but capital improvements come from contributions from interested individuals or communities. The Devereux Foundation, founded by Miss Helena T. Devereux, now its administrative consultant, is a nonprofit organization begun 46 years ago. Many of its graduates have entered accredited colleges, including the University of Texas.

Eye Care Leaflets Available

The Prevention of Blindness Department of the Philadelphia Association for the Blind, Inc., has revised and republished three of its most popular leaflets, "Why Glasses?," "Danger Ahead—Glaucoma," and "Check Your Child's Eyes."

Anyone interested in receiving free samples of 14 available leaflets on eye care and prevention of blindness, including those mentioned here, may write to the Department, 100 East Price Street, Philadelphia.

Hospital Group to List Inpatient Units

A program to list inpatient care institutions other than hospitals has been approved by the American Hospital Association's board of trustees. The listing program has as its primary purpose the provision of a census of institutions, not a measure of quality of care.

The board also approved a statement and a release on blood transfusions for Jehovah's Witnesses who object to the administration of blood on religious grounds. It was recommended that hospitals obtain a written refusal by adult patients or parents of young patients to absolve the hospital personnel from liability for failure to administer blood.

Pharmaceutical "Principle" Stated

The Pharmaceutical Manufacturers Association, in a 1,000-word Statement of Principle released February 1, warned that the United States faces a 25 per cent deficit in the number of medical scientists needed by 1970. It urged the government to give top priority to basic medical research programs, declaring that in modern medicine it is basic knowledge which needs to be increased as rapidly as possible.

Austin Smith Heads Pharmaceutical Group

Dr. Austin Smith, former editor of the *Journal of the American Medical Association*, and former secretary of the AMA's Council on Drugs, is the first full-time president of the Pharmaceutical Manufacturers' Association. He will be chief administrative officer and spokesman for the organization, which combines the former American Drug Manufacturers' Association and the American Pharmaceutical Manufacturers' Association.

Workmen's Compensation Laws Made Clearer for Physicians

Almost every physician may find that he has a role in the administration of the Texas Workmen's Compensation Insurance Laws as changed in recent years.

Under this act, the physician has the duty of giving competent medical and surgical assistance at a reasonable cost consistent with the patient's standard of living and furnishing prompt and accurate reports to the insurance carrier so that weekly compensation may be paid promptly when it becomes due.

Much confusion seems to exist concerning reports which the physician is responsible for making, according to the Committee for Liaison with Workmen's Compensation Insurance Companies of the Texas Medical Association. They need not be on any particular form nor follow any set or arbitrary arrangement. The forms used and furnished by the majority of companies are prepared for the physician's guidance and assistance, but are not mandatory. In fact, there are some instances when the forms are not suitable and a narrative medical report is necessary. A narrative report, if it contains the needed information, is always acceptable and preferred.

Fundamentally, each report should contain an accurate recitation of the history secured from the patient; a description of the symptoms; a statement in plain understandable language with an explanation of medical terms when such are absolutely necessary; a report of the findings; an opinion as definite as possible of the causal connection between the history and the conditions found; and an opinion as to the prognosis and the nature and probable duration of the treatment recommended.

Such report, which may be termed the original report, should be submitted within a reasonable time following the first visit and should be supplemented with periodic progress reports as warranted by the individual case. These need not repeat all of the above information, but the final report should be a complete resume of the patient's case and should contain, in addition, the final opinion as to the nature and extent of the physical disability.

American College of Radiology Producing Film

A motion picture illustrating the medical aspects of radiation, including protective measures in diagnostic radiologic examinations, will be distributed soon by the American College of Radiology to the nation's physicians.

The 16 mm., half-hour color film will be premiered at the American Medical Association annual meeting in June. Production supervision was by a committee chairmanned by Dr. Wendell G. Scott, professor of clinical radiology, Washington University School of Medicine, St. Louis. The film was financed by the college and a Rockefeller Foundation grant.

Youth Fitness Week; May 3-9

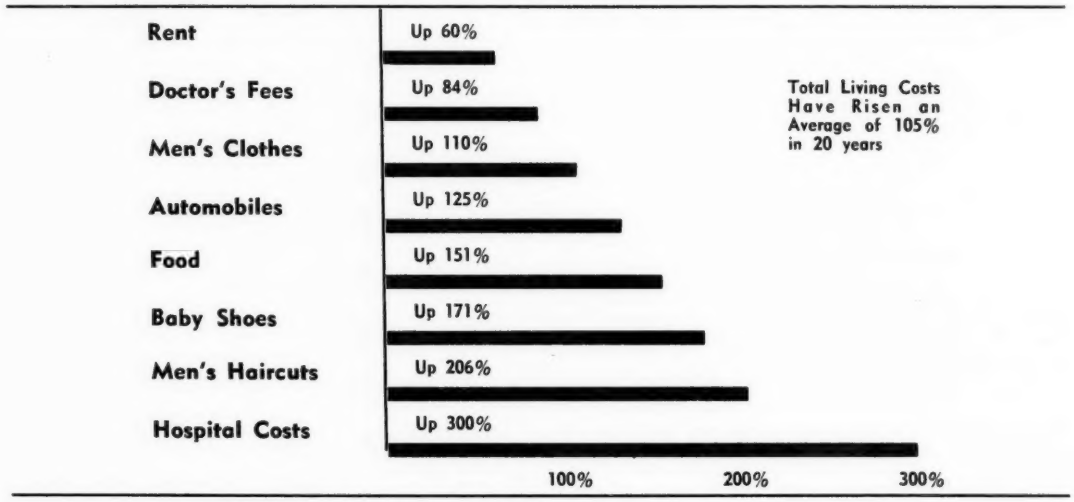
The week of May 3-9 was proclaimed National Youth Fitness Week by President Eisenhower.

The proclamation called attention to the fact that "we must strive to improve the fitness of our youth by determined and coordinated efforts" and that "in this challenging world, it is essential that our young people recognize their obligation to themselves, to their families, and to the Nation, to endeavor to keep themselves mentally, emotionally, spiritually, socially, and physically fit."

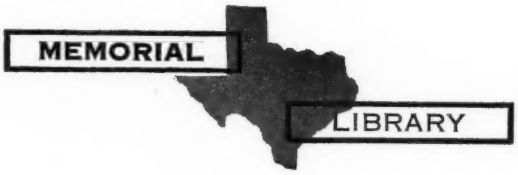
New Eye Care Pamphlet Out

"Why Drops?" is the title of a new pamphlet prepared by the National Medical Foundation for Eye Care and available to doctors for distribution to their patients upon request to the foundation. More than a quarter of a million copies have been purchased by ophthalmologist members of the foundation since December, 1958. Also available is an earlier pamphlet, "What Is an Ophthalmologist?" The pamphlets may be requested from the foundation executive offices, 250 West 57th Street, New York 19.

COST OF LIVING, 1938-1958 (Selected Items).



Source: United States Government Cost of Living Index.
Modified from AMA News, Sept. 22, 1958, p. 8.



Publications by Texas Physicians

The following is a partial list of articles written by Texas physicians and available at the Memorial Library of the Texas Medical Association. The list will be continued in a subsequent issue.

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DeBakey, Michael E.; Cooley, Denton A.; Crawford, E. Stanley; and Morris, George C., Jr.: *Clinical Application of a New Flexible Knitted Dacron Arterial Substitute,* Am. Surgeon 24:862-869 (Dec.) 1958.

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DePalma, Anthony T.; Hardy, S. Baron; and Erickson, Ethel E.: *Blastomycotic Ulcer of the Lower Lip,* Am. Surgeon 24:919-921 (Dec.) 1958.

Dmochowski, Leon: *Studies on Submicroscopic Structure of Leukemias of Known or Suspected Viral Origin: A Review,* Blood 13:1017-1042 (Nov.) 1958.

Doctor, V. M.; Bergsagel, D. E.; and Shullenberger, C. C.: *Effect of Myleran and 6-Mercaptopurine (6-MP) on the Serum Level of Vitamin B_{12} in Chronic Myelocytic Leukemia,* Blood 14:274-278 (March) 1959.

Donoho, Charles P.: *Use of Anticholinergic Drugs for Benign Breast Diseases,* Am. Surgeon 25:79-85 (Feb.) 1959.

Fields, W. S.: *Surgical Considerations in Cerebral Arterial Insufficiency,* Neurology 8:801-808 (Nov.) 1958.

Fisher, Peter B., and Jordan, George L., Jr.: *Billroth I Gastrectomy for the Treatment of Duodenal Ulcer,* Am. Surgeon 24: 922-926 (Dec.) 1958.

Foster, Riley P.; Tucker, Andrew L.; and Chamberlin, James Allen: *Surgical Treatment of Parotid Tumors: Presentation of Current Approach and Evaluation of 50 Cases,* Am. Surgeon 24:927-938 (Dec.) 1958.

Fretz, Howard Z.: *Granular Urethritis in Women,* J.A.M.A. 169:933-937 (Feb. 28) 1959.

Guinn, Gene A., and Leader, Abel J.: *Management of Ureteral Colic Caused by Calculus,* Am. Surgeon 24:939-943 (Dec.) 1958.

Harris, Dean A.: *A Rapid and Simple Technique for the Detection of Nonorganic Hearing Loss,* A.M.A. Arch. Otolaryng. 68:758-760 (Dec.) 1958.

Hardy, S. Baron: *Conservative Method of Repairing Surface Defects of the Lower Extremities Where Bone Is Exposed,* Am. Surgeon 24:944-951 (Dec.) 1958.

Herrmann, George R.; Park, Hi Myung; and Hejtmancik, Milton R.: *Psroxysmal Ventricular Tachycardia; A Clinical and Electrocardiographic Study,* Am. Heart J. 57:166-176 (Feb.) 1959.

Hightower, Nicholas C., Jr.: *Chronic Ulcerative Colitis; Complications,* Am. J. Digest. Dis. 3:861-876 (Nov.) 1958.

Hills, William J.: *Treatment of Tetanus,* Am. Surgeon 25:35-37 (Jan.) 1959.

Holle, Henry A.: *Viewpoint of Organized Medicine,* Am. J. Pub. Health 49:173-176 (Feb.) 1959.

Howell, J. B., and Caro, Marcus, R.: *Basal Cell Nevus,* A.M.A. Arch. Dermat. 79:67-80 (Jan.) 1959.

Hunter, Dewitt T., Jr., and Hutcheson, James B.: *Krukenberg Tumor of the Testicle: Report of a Second Case,* J. Urol. 81:305-308.

Karnaky, Karl John: *Comparison of Battery pH Readings and Electronic pH Recordings of the Vagina in Trichomonas Vaginalis Infestation,* Am. J. Obst. & Gynec. 77:149-154 (Jan.) 1959.

Karotkin, Lester: *Spontaneous Internal Biliary Fistula,* M. Ann. District of Columbia 28:22-29 (Jan.) 1959.

Gifts to the Library

Dr. Allen H. Neighbors, Jr., Austin, 30 journals.
Dr. Harold L. Robinson, Austin, 175 journals.
Dr. J. Collier Rucker, Jacksonville, 53 journals.
Dr. B. O. White, Austin, 10 journals.
Dr. H. J. Kaplan, Bay City, 14 books.
Dr. Walter D. Roberts, Austin, 96 journals.
Dr. George E. Clark, Jr., Austin, 28 journals, 12 reprints.
Dr. Sam N. Key, Jr., Austin, 34 journals.
Dr. David R. Womack, Austin, 96 journals, 4 reprints.
Dr. Walter K. Long, Austin, 7 books.
Dr. E. D. Morton, Bridgeport, 1 book, 1 record.
Dr. Louis J. Stahl, Gonzales, 218 journals.
Dr. Harry T. Davidson, Austin, 8 journals.

Dr. Emmett A. Doles, Austin, 24 journals.
Dr. Albert D. Patillo, Austin, 42 journals.
Drs. Carey and Georgia Legget, Austin, 160 journals, 2 reprints.
Dr. Fred L. Adair, Maitland, Fla., 13 reprints.
Dr. C. M. Covington, Austin, 7 books.
Dr. Troy A. Shafer, Harlingen, 57 journals.
Dr. Joe C. Rude, Austin, 30 journals.
Dr. Heinrick Lamm, La Feria, 125 journals.

★ Books

Books Newly Acquired

Ackerman, Lauren V.: *Surgical Pathology,* ed. 2, St. Louis, C. V. Mosby, 1959.

American Druggist Blue Book, 1959-60, Chicago, American Druggist, 1959.

Antibiotic Annual 1958-59, New York, Medical Encyclopedia, Inc., 1959.

Association for Research in Nervous and Mental Diseases: *Effect of Pharmacologic Agents on the Nervous System,* Baltimore, Williams and Wilkins, 1959.

Beecher, Henry K.: *Experimentation in Man,* Springfield, Ill., Charles C Thomas, 1959.

Coats, John Boyd, Ed.: *Surgery on World War II, Neurosurgery,* Washington, Department of Army, Govt. Printing Press, 1958.

Duncan, Garfield G.: *Diseases of Metabolism,* ed. 4, Philadelphia, W. B. Saunders, 1959.

Field, John B.: *Cancer Diagnosis and Treatment,* Boston, Little, Brown & Co., 1959.

Gale Research Company: *Encyclopedia of American Associations,* ed. 2, Detroit, Gale, 1959.

Holmes, William John: *Geographic Ophthalmology,* Springfield, Ill., Charles C Thomas, 1959.

Lamm, Stanley S.: *Pediatric Neurology,* New York, Landsberger Medical Books, 1959.

Lewis, George M., and others: *An Introduction to Medical Mycology,* ed. 4, Chicago, Year Book Publishers, 1958.

Moss, William T.: *Therapeutic Radiology . . .,* St. Louis, C. V. Mosby, 1959.

Pilcher, Wayland D.: *The Medical Examiner in Texas,* Austin, University of Texas, 1959.

Sherlock, Sheila: *Diseases of the Liver and Biliary System,* ed. 2, Oxford, Blackwell, 1958.

Wakeler, Sir Cecil: *Hey Groves' Synopsis of Surgery,* Baltimore, Williams and Wilkins, 1958.

Year Book of Ophthalmology 1958-59, Chicago, Year Book Publishers, 1959.

Year Book of Urology 1958-59, Chicago, Year Book Publishers, 1959.

Book Notes

Schizophrenia

MANFRED SAKEL, Vienna. 335 pages. ed. 1. $5. New York, Philosophical Library, 1958.

This book is difficult to read and to review. It is difficult to read because one must ignore countless annoying errors in spelling, grammar, and sentence structure. It is difficult to review without accurate and complete biographical data; without knowledge of the conditions under which the book was written; and in the face of a vast number of opinions to which the American physiologist and psychiatrist must take very strong exception.

In spite of these difficulties, the book deserves reading by American specialists. It discloses a continental evolution of psychiatric thought which is far removed from the psychodynamic and very close to the biochemical attitude which is coming to the fore at the present time. This is not to imply that one or the other approach is to be discarded, but rather, that some sort of synthesis may be expected in the coming years. Many statements made in the course of the book are, however, nothing more than dogmatic deductions or inferences. Often, the reader gets the impression of retrospective rationalization in lieu of scientific induction.

Withal, on the assumption that one is dealing in Sakel's case with the phenomenon of "chance and the prepared mind," the book cannot be ignored. After all, the author started one of the great therapeutic breakthroughs of twentieth century psychiatry: the insulin treatment, now probably obsolescent, of schizophrenia.

—J. Edward Stern, M.D., El Paso.

Head Injuries

E. S. GURDJIAN, M.D., Professor and Chairman, Department of Neurosurgery, Wayne State University College of Medicine; and J. E. WEBSTER, M.D., Associate Professor of Neurological Surgery, Wayne State University College of Medicine, Detroit. 482 pages. ed. 1. $14. Boston and Toronto, Little, Brown and Company, 1958.

Drawing upon a wealth of clinical, experimental, and military (Dr. Webster) material, these authors have produced a concise text which to this reviewer is somewhat unique in its field. The liberal use of photographs and beautiful line drawings supplement the well written text. Yet the whole volume is kept within the bounds of a usable reference work.

Included among the 12 chapters encompassing the entire field of head injuries is much fundamental research in the mechanism of skull fractures. Unique, also, is the inclusion of discussions of head injury as it pertains to children, sports, and medical-legal problems. An excellent bibliography accompanies each chapter.

This text is highly recommended for inclusion in every hospital staff library.

—Ralph A. Munslow, M.D., San Antonio.

Modern Clinical Psychiatry

ARTHUR P. NOYES, M.D., Superintendent, Norristown State Hospital, Norristown, Pa., and LAWRENCE C. KOLB, M.D., Professor and Executive Officer, Department of Psychiatry, College of Physicians and Surgeons, Columbia University; Director, New York State Psychiatric Institute. ed. 5. 694 pages. $8. Philadelphia and London, W. B. Saunders Company, 1958.

This is one of the most widely used of psychiatric texts in the United States. It can be an invaluable reference to any person dealing with psychiatric problems. The book is conservative and provides sound practical approaches through many avenues toward helping the patient. The technique of administering insulin shock treatment is outlined nicely, as well as the fact that such treatment is considered less effective for schizophrenia than it has been previously.

There is an excellent historical perspective presented to much of what is covered, as well as a dynamic approach, using much of the fundamental knowledge of psychoanalysis. This book is a necessity to those who spend much of their time dealing with troubled people.

ORGANIZATION SECTION

★ Texas Medical Association

Free Choice, Reorganization, Dues Reduction, Elections Top Annual Session Business

Affirmation of its belief in the right of free choice of physician, a reduction in dues, and a sweeping reorganization of the committee structure were voted by the House of Delegates when the Texas Medical Association held its ninety-second annual session in San Antonio April 18-22.

There was a total registration of 2,931 (1,604 members) for the big meeting, which featured a scientific program headed by 25 distinguished guest speakers, 40 additional special speakers, and about 50 member-speakers of the Association. Held during the session were specialty group meetings, refresher courses, general meetings, motion pictures, scientific section programs, and scientific and technical exhibits, as well as social and business events.

Six hundred forty-seven women attended the annual meeting of the Woman's Auxiliary during the same period.

New Officials Head Association

Dr. Franklin W. Yeager of Corpus Christi became President of the Association, succeeding Dr. Howard O. Smith of Marlin, while Mrs. Haskell D. Hatfield of El Paso received the gavel of the Woman's Auxiliary from the retiring President, Mrs. John D. Gleckler, Denison.

For the first time in the 106 year history of the Texas Medical Association, a woman—Dr. May Owen of Fort Worth—was named President-Elect. Mrs. Ramsay Moore, Dallas, was designated President-Elect of the Woman's Auxiliary.

In other elections, Dr. Barton E. Park, Dallas, became Association Vice-President; Dr. C. P. Hardwicke, Austin, and Dr. James D. Murphy, Fort Worth, were reelected Speaker and Vice-Speaker of the House of Delegates respectively; Dr. J. M. Travis, Jacksonville, was renamed Secretary, and Dr. T. H. Thomason, Fort Worth, Treasurer.

Dr. Troy A. Shafer, Harlingen, was reelected Trustee. Also reelected were the Councilors of the Third District (Dr. Robert A. Neblett, Canyon), Fifth District (Dr. Walter Walthall, San Antonio), Sixth District (Dr. Stanley W. Bohmfalk, Weslaco), and Twelfth District (Dr. Tom M. Oliver, Waco), while Dr. James E. Ball, Mount Pleasant, was elected Councilor of the Fifteenth District to succeed Dr. H. O. Padgett, Marshall.

The four American Medical Association delegates whose terms expired were returned to their offices: Drs. T. C. Terrell, Fort Worth; Milford O. Rouse, Dallas; J. B. Copeland, San Antonio; and J. C. Terrell, Stephenville. Likewise, the alternate delegates were reelected: Drs. Denton Kerr, Houston; J. W. Rainer, Odessa; George Turner, El Paso; and J. Layton Cochran, San Antonio.

Free Choice Supported

A stand favoring free choice of physicians, opposition to panel medicine, and against the setting of a fee schedule by the Texas Medical Association was taken by the House of Delegates during annual session. The House approved several resolutions introduced in answer to a request from the delgates to the American Medical Association for advice in relation to a national report on medical care plans. In essence, its position was expressed by the Reference Committee on Medical Service and Public Relations in declaring that "all patients have free choice of physician, and this concept is to be considered a fundamental principle, incontrovertible, unalterable, and essential to good medical care without qualification."

The House rejected the panel system of medicine and adopted an amendment to the By-Laws forbidding the Association to establish fee schedules for its members.

Reorganization Plan Accepted

The House of Delegates approved a major reorganization plan recommended by the Committee on Reorganization. Only minor revisions were made in the plan, which places committee work under seven councils which, in turn, report to the House of Delegates and the Executive Board (old Executive Council).

Although many of the committees will remain essentially as before, some names have been simplified and some special committees have been made standing committees. All special committees will be appointed for 1 year, with three, five, or seven members. Standing committees will have three, five, seven, or nine members, each serving a 3 year term, with a maximum of three terms per member. Councils will have five, seven, or nine members, also named for 3 year terms and a limit of three terms. Councils will be on Annual Session, Medical Jurisprudence, Public Relations and Public Service, Medical Education and Hospitals, Scientific Advancement, Medical Service and Insurance, and Constitution and By-Laws.

Dr. May Owen of Fort Worth, President-Elect of the Texas Medical Association, is the first woman to be so honored.

(1) Dr. Newell W. Philpott, Montreal, Canada, reads about fellow guest speakers in the *Annual Session Reporter*. **(2)** Past presidents reminisce at a General Meeting Luncheon. **(3)** The Mission Pharmacal Express stops for passengers headed to another annual session hotel. **(4)** Standing room only—outside the door—attests to popularity of General Meeting Luncheons. **(5)** The chairman of the Board of Trustees, Dr. R. W. Kimbro of Cleburne, and the chairman of the Committee on General Arrangements, Dr. A. Fletcher Clark, Jr. of San Antonio, talk over an annual session detail. **(6)** One of the well attended specialty societies, Texas Heart Association, presents a panel of distinguished speakers including (at right) Dr. Francis L. Chamberlain of San Francisco, president of the American Heart Association. **(7)** Dr. C. E. Oswalt of Fort Stockton debates a point in the House of Delegates.

(1) Dr. Joe R. Donaldson, Pampa, presents the Anson Jones Award to Mrs. Judy Bonner of the *Dallas Times-Herald*. **(2)** Dr. Walter C. Alvarez, Chicago, guest speaker, and Dr. Howard O. Smith, Marlin, check releases in the newspaper-bedecked press room. **(3)** Dr. Thomas L. Shipman, Los Alamos, N. Mex., and Dr. Herbert C. Allen, Jr., Houston, ponder the hazards of atomic radiation. **(4)** Dr. E. Vincent Askey of Los Angeles, Speaker of the American Medical Association's House of Delegates, leaves the exhibit hall. **(5)** Dr. Joseph Vincent Hopkins of Victoria poses after his selection as General Practitioner of the Year. **(6)** Edd A. Robinson of Abilene and Mrs. Sadie J. Brown of San Antonio, representing pharmaceutical and nursing organizations, respectively, look past Dr. Jack B. Lee of San Antonio and AMA President Dr. Gunnar Gundersen of La Crosse, Wis., at a General Meeting Luncheon. **(7)** Dr. L. Bonham Jones of San Antonio, chairman of the Council on Scientific Work, is congratulated by Dr. Gundersen.

Dr. Yeager, incoming President, voiced the opinion that the reorganization would be a progressive and effective step forward, keeping pace with the growth of the Association. He warned, however, that adoption of the revised committee structure would mean some disruption in the immediate future and urged cooperation and patience while the necessary readjustments are being made.

Details in the reorganization which had created interest in the reference committee deliberations and were approved by the House included continuance of the full membership of the Council on Medical Jurisprudence as ex officio members of the House of Delegates and of the Executive Board and addition of the AMA alternate delegates as ex officio members of the Executive Board. The alternate delegates remain as ex officio members of the House. Reference committees of the House will be appointed by the Speaker rather than by the President, as heretofore. A new Emergency Policy Board of five members to act in urgent situations was authorized.

The size of the Board of Trustees will remain at five members, instead of nine as proposed in a resolution introduced last year. Vacancies in elective offices for which the By-Laws fail to specify other means will be filled by appointment of the President only until the next meeting of the House of Delegates. A new Committee on Rehabilitation was authorized, and the Committee on Spas, appointed this past year for the first time, will be continued one more year as a special committee.

Growth of Association Cited

The need for reorganization of the Association's committee structure arose from the growth and complexity of the organization, as pointed out when the Committee on Reorganization was established in 1958.

Evidence of this growth was presented in the report of the Executive Secretary, who cited these statistics: 7,917 members this year; 3,048 reference requests filled by the Memorial Library during the year; 310,000 pieces of mail sent from the central office; 38 councils and committees with 354 physicians serving in official positions; 114 visitations to county societies.

Six factors in the increased tempo of the Association the past few years were discussed by the Executive Secretary: an enlarged and enhanced annual session, effective relations with specialty and other health groups, good leadership, increased services, stepped up field service, and work with new members and doctors-to-be.

Financial Affairs Reported

Although operating expenditures are at a level just within operating funds available, the Board of Trustees reported the finances of the Association in excellent condition. The mortgage on the headquarters building and other expenses relative to the building will be paid off this year, the Trustees noted. They called attention to some of the major annual costs paid from the general operating funds: *Texas State Journal of Medicine,* $100,000; annual session, $30,000; field service, $20,000; Woman's Auxiliary, $18,000 (expenses of the Memorial Library, $38,000, are covered by a special Library fund).

The Trustees commented that revenue from *Journal* advertising and annual session exhibits, increasing membership, economy in management, and careful evaluation of expenditures have made possible a balanced expanded budget. One-third of income now comes from sources other than membership dues.

Dues Reduction Voted

With the various factors previously mentioned in mind, and upon the recommendation of the Board of Trustees and the Reference Committee on Finance, the House of Delegates adopted amendments to the By-Laws which will reduce total annual dues from $50 to $45, effective January 1, 1960. This was accomplished by eliminating the $15 earmarked for building funds and increasing the basic dues by $10. Although the need for the building funds will cease with final payments on the mortgage this year, the Trustees pointed out, certain expenses for the headquarters building will continue, and other expenses of the Association are rising.

Action was taken at the same time to reduce dues for intern and resident members from $4 to $3 and to direct the Trustees to set aside a contingency fund for emergencies. Approval of the reorganization plan abolished the medical defense fund.

Scientific Work Reviewed

Commending the Council on Scientific Work, Committee on Scientific Exhibits, Committee on Memorial Services, and, informally, the Committee on General Arrangements for the caliber of the current annual session, the House of Delegates also took cognizance of a wealth of scientific activity carried on by the Association's committees.

Annual session symposiums on cancer, industrial health, and atomic radiation were noted as valuable contributions. The Committee on Blood Banks was asked to continue its study of transfusion hepatitis, and AMA delegates were asked to seek on the national level a closer cooperation between the American Association of Blood Banks and the American Red Cross in collection and distribution of blood. County societies were encouraged to appoint committees on problems of aging. The sale of Sominex without a physician's prescription was condemned.

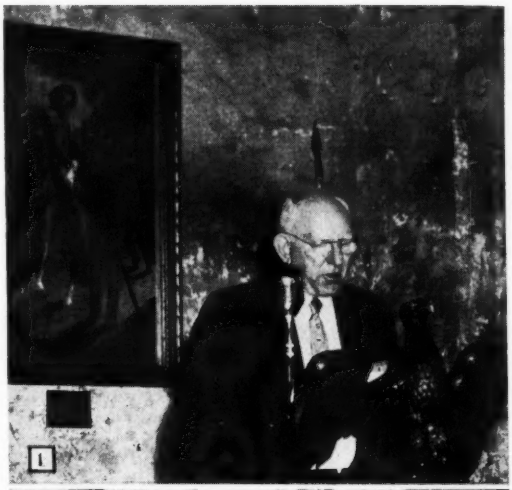
Approval was given to a recommendation from the Committee on Rural Health and Doctor Distribution that the medical schools be surveyed each year to determine types of practice and locations preferred by students.

Efforts will be made to arrange for a small fee for the initial visit to a physician of a bracero for nonoccupational illness. The Committee on Military and Veterans Affairs will study the relationship of Veterans Administration hospitals to Texas medical schools, and Veterans Administration hospitals will be subject for education of physicians and laymen. A deficit of $15,000,000 annually in operation of the nation's medical schools was noted by the State Committee for the American Medical Education Foundation, which announced a contribution of about $44,000 from Texas physicians ($55.50 per capita) last year. The Committee on Medical History invited gifts of rare books to the Association's Library.

The American Medical Association will be asked to reconsider its approval of a proposed change in the course of study for medical technologists from 2 to 3 years on the basis that fewer technologists will become available and junior college programs will be impractical.

Membership Considered

Constitutional and by-law changes considered included an amendment which would require American citizenship for membership in the Association; it was referred to the Board of Councilors for study and recommendation next year. A special category of membership for state and fed-



(1) Inside the historic Alamo, Dr. Valin R. Woodward, Austin, delivers the memorial address for deceased physicians. (2) Dr. Franklin W. Yeager, Corpus Christi, and Dr. Howard O. Smith, Marlin, incoming and outgoing presidents of the Texas Medical Association, preface memorial services with a floral tribute to the three physicians who gave their lives in the Alamo.

eral employees was rejected, and a proposal to permit certain members to transfer from one county society to another without the necessity of becoming provisional members was disapproved, although honorary and inactive members may so transfer without loss of membership status.

Health Insurance Studied

The Committee on Voluntary Health Insurance and Health Care Costs received authorization to continue its study with Blue Cross-Blue Shield of the health insurance needs of older persons and to initiate a plan of indemnity coverage for them.

Association members participating in the Association's 3 year disability insurance program received news of a 15 per cent bonus in disability payments beginning November 1.

Codes Call for Cooperation

A detailed "Code for Physicians and Attorneys of Texas" was adopted upon recommendation of the Committee on Liaison with State Bar of Texas. The Committee on Public Relations presented plans for a code of cooperation to assist relationships among physicians, hosiptals, and news media, which were approved by the House.

The Council on Medical Jurisprudence distributed information regarding the present status in the Texas Legislature of bills of medical and health interest and commended Philip R. Overton, general counsel, for his important role. The House also adopted a resolution of appreciation to Dr. G. W. Cleveland of Austin, outgoing chairman of the Council on Medical Jurisprudence.

Resolutions approving the Keogh-Simpson bill, condemning H.R. 9467-type legislation, and opposing inclusion of physicians in the social security system called attention to national legislation.

Honors and Appreciation

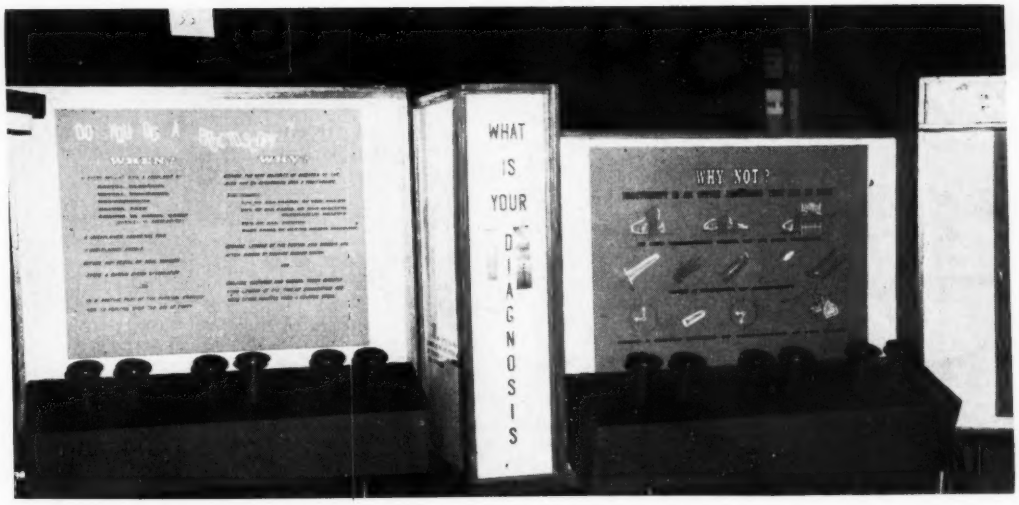
Dr. Joseph Vincent Hopkins of Victoria was unanimously elected General Practitioner of the Year. The Board of Councilors, which placed Dr. Hopkins' name in nomination, recommended a change in procedure for election of the GP, which will provide for selection by the Councilors of a single nominee for election by the House.

Announcement that Dr. P. I. Nixon of San Antonio and Dr. W. R. Cooke of Galveston are being recommended for emeritous membership called attention to the fact that election to emeritous membership requires a year for final action.

Appreciation was expressed by the House to the Woman's Auxiliary of the Texas Medical Association for its achievements. Mrs. John D. Gleckler of Denison, Auxiliary President, cited figures suggesting accomplishments of the Auxiliary the past year: $15,000 contribution to AMEF, 11,750 high school students in 310 Future Nurse Clubs, assistance with 340 science fairs including 5,900 exhibits, and showing of 1,094 motion picture films on health subjects.

A standing ovation followed the address of the President of the Association, Dr. Howard O. Smith of Marlin, who challenged his fellow physicians to be good citizens as well as good physicians.

(1) Fiesta's King Antonio XXXVII greets a former King Antonio and past president of the Texas Medical Association, Dr. J. Layton Cochran of San Antonio. (2) An entertainer at the President's Party dances with guest speaker Dr. Edward L. Compere of Chicago. (3) One of the colorful floats—with live music—of the River Parade.



This display on proctoscopy won for its exhibitors, Drs. John McGivney, Marcel Patterson, Edward Lefeber, and Louis Field of the University of Texas Medical Branch, Galveston, not only first place in the official awards in the group exhibit category but also first place in the popularity poll competition for scientific exhibits.

Scientific Exhibits Merit Awards

Awards for scientific exhibits at the San Antonio convention of the Texas Medical Association were given in three traditional divisions—individual, group, and institutional—and in a new category, for which winners were selected by popularity poll. Selection was from a total of 41 displays.

First place in the individual division went to Dr. Oscar L. Morphis, Fort Worth, for an exhibit entitled "Implantation of Radioactive Materials Using Teflon Tubing to Reduce Radiation Hazard to a Minimum." Second place went to "Surgical Aspects of Diaphragmatic Hernias" by Dr. Lawrence M. Shefts, San Antonio; and honorable mention to Dr. Marvin E. Chernosky, Houston, for "Dermo-Planing for the Prevention of Skin Cancer."

In the group exhibit division, first place award went to Drs. John McGivney, Marcel Patterson, Edward Lefeber, and Louis Field, University of Texas Medical Branch, Galveston, for "What Is Your Diagnosis? A Clinic in Proctoscopy." Drs. E. Stanley Crawford, John R. Kelsey, Jr., and John Fitzgerald, Houston, won second place for an exhibit titled "The Treatment of Bleeding Esophageal Varices and Portal Hypertension." Honorable mention went to Drs. Robert R. Shaw, Donald L. Paulson, and John L. Kee, Jr., Dallas, for "Bullous Emphysems."

The institutional division's first place award went to the University of Texas Medical Branch, Galveston, Drs. A. R. Remmers and H. E. Sarles, for "Sarcoidosis in Texas." Second place went to Hermann Hospital, Houston, Drs. W. T. Arnold, J. M. Hampton, H. G. Glass, and Walter Olin, and Catherine Carruth, R.N., for "Cytological Evaluation of Gastric Lesions." Honorable mention went to Scott and White Clinic, Temple, Drs. R. D. Haines, W. N. Powell, R. A. Murray, A. W. Sommer, and W. A. Ross, for "Multiple Myeloma."

Popularity poll winners were Drs. McGivney, Patterson, Lefeber, and Field, for "What Is Your Diagnosis? A Clinic in Proctoscopy."

"What Should You Know About X-Ray Protection?" won second popular vote for Drs. Francis Edward O'Neill, Jerome J. Weisner, Alvin Thaggard, and Roy Bradley, San Antonio; while third place went to Scott and White Clinic, Temple, Drs. D. A. Malooly, W. N. Powell, N. C. Hightower, Jr., R. D. Haines, and J. D. Ibarra, for an exhibit called "Acute Intermittent Porphyria."

Investments Under New Management

Investment funds under the direction of the Board of Trustees of the Texas Medical Association have been placed under the management of Investors Diversified Services, Inc.

This action followed a study of several months and a decision by the Trustees that since investments require specialized professional skill, it would be wise to place the assets of five funds under management of some organization well equipped to handle such responsibility. Investor's Diversified Services, the largest investment company in America with a record of 65 years of continuous operation, was chosen after consideration of a number of respected mutual funds and a visit to the home offices of the company in Minneapolis.

Recently, in addition to being responsible for the general, building, medical defense, and Texas Memorial Medical Library Association funds, the Trustees accepted trusteeship with the dean of the University of Texas Medical Branch of a scholarship fund bequeathed by the late Dr. Sam E. Thompson of Kerrville. At the time assets of this fund were turned over to the Trustees in January, 1957, the market value of stocks and bonds was $524,000; this had increased to more than $740,000 as of January, 1959.

A mutual fund was chosen by the Trustees for investment of these monies because they offer broad diversification, a high selection of securities, constant supervision and management, a reasonably good return, and a hedge against inflation.

★ Woman's Auxiliary

Woman's Auxiliary Convention Emphasizes "Unity in Service"

It was not a coincidence that the annual session of the Texas Medical Association and its Woman's Auxiliary took place at the same time that San Antonio celebrated Fiesta de San Jacinto, but the results of careful and long-range planning.

Approximately 600 Auxiliary members attended the 3 day session. Some who came with their families stayed on for the week-long Fiesta program. All of the table and room decorations were beautiful, colorful, and lavish—each depicting a fiesta activity, such as the River Parade, the Queen's Garden Party, Battle of the Flowers, the Coronation, and Fiesta Carnival.

Although "fiesta" was in the air, the business sessions of the convention took on a serious garb. The underlying theme was "Unity in Service." This was very evident during the first meeting—a breakfast for the Council Women and Councilors. Dr. R. Mayo Tenery, Waxahachie, Councilor of District 14, suggested that the Auxiliary keep the community informed on the doctor's point of view.

Reports of county auxiliary presidents were heard at one meeting and awards were presented by Mrs. T. J. Archer, Jr., Austin, chairman of the Historical Committee. Gonzales, an auxiliary of four members, received eight first place ribbons. Other auxiliaries receiving a number of awards were Brazoria, Bell, El Paso, Navarro, Travis, and Dallas.

Recommendations and Revisions

State officers, committee chairmen, and district council women reported at another meeting, and the following recommendations were accepted:

1. That the Woman's Auxiliary to the Bexar County Medical Society be reimbursed for the cost of the tea honoring Dr. and Mrs. John D. Gleckler and Dr. and Mrs. Howard O. Smith.

2. That an additional $100 be granted to the Treasurer to apply on expenses incurred in the office.

3. That the Auxiliary contribute $1,000 to the American Medical Education Foundation from the Special Fund.

The Revisions Committee submitted the following changes to the By-Laws, both of which were adopted:

Article III, Membership.

Section 2, (b) Widows of physicians who were in good standing of the Texas Medical Association may be active members and eligible for all offices except that of President.

To be changed to:

Section 2, (b) Widows of physicians who were in good standing of the Texas Medical Association may be active members and eligible for all offices.

Article IX, Duties of Officers.

Section 3. The President-Elect.

(Add this phrase to her duties) The President-Elect shall upon the death, resignation, or removal of the President fill that office for the unexpired term.

The adoption of this revision changes Article IX, Duties of Officers, as follows:

Section 4. The First Vice-President shall be State Chairman of Organization and Membership. She shall, in the absence of the President, perform the duties of that office. The Organization and Membership Committee shall consist of the other Vice-Presidents and Council Women.

(1) Mrs. Robert E. Leslie of El Campo, Council Woman for District 8, holds the membership cup won by Wharton-Jackson-Matagorda-Fort Bend Counties Auxiliary. **(2)** The president, Mrs. Odon F. von Werssowetz of Gonzales, accepts eight awards of merit for four-member Gonzales Auxiliary. **(3)** Mrs. T. J. Archer and Mrs. R. O. Swearingen, Austin, co-chairmen of the Historical Committee, display blue ribbons distributed to meritorious county auxiliaries. **(4)** Mrs. Haskell D. Hatfield of El Paso, incoming President of the Woman's Auxiliary to the Texas Medical Association, receives good wishes from her predecessor, Mrs. John D. Gleckler of Denison.

Mrs. E. Arthur Underwood, Vancouver, Wash., President of the Woman's Auxiliary to the American Medical Association, introduced by Mrs. Frank N. Haggard, San Antonio, was the guest speaker at the luncheon honoring county presidents. In her talk, "Unity Depends on You," Mrs. Underwood stressed the importance of certain Auxiliary projects—recruitment, *Today's Health,* and American Medical Education Foundation. Of AMEF, Mrs. Underwood said, "We have contributed to it as an Auxiliary since 1952. This year will make our total contributions over $1,000,000." Mrs. Underwood's theme, "Safeguard Today's Health for Tomorrow," emphasized the point that our concern is the individual; the individual's being well determines the community's well-being.

An original skit, produced and enacted by members of the Nueces County Auxiliary, provided the laughter advocated by doctors for good health. At the third business session, Mrs. George W. Owen, Jackson, Miss., President, brought greetings from the Woman's Auxiliary to the Southern Medical Association. She was presented by Mrs. O. W. Robinson, Paris. A cordial invitation was extended to attend the SMA Convention in Atlanta, Ga., November 16-19.

Mrs. George Turner, El Paso, installed the newly elected officers:

President.—Mrs. Haskell D. Hatfield, El Paso.
President-Elect.—Mrs. Ramsay H. Moore, Dallas.
First Vice-President.—Mrs. G. Bedford Brown, Angleton.
Second Vice-President.—Mrs. William C. Barksdale, Borger.
Third Vice-President.—Mrs. Hamilton Ford, LaMarque.
Fourth Vice-President.—Mrs. B. C. Wallace, Jr., Waxahachie.
Fifth Vice-President.—Mrs. Forrest C. Orman, Lufkin.
Recording Secretary.—Mrs. Thomas J. Vanzant, Houston.
Corresponding Secretary.—Mrs. H. Dodson Garrett, El Paso.
Treasurer.—Mrs. Garland G. Zedler, Austin.
Publicity Secretary.—Mrs. Cuvier P. Lipscomb, Fort Worth.
Parliamentarian.—Mrs. Edward W. Coyle, San Antonio.

At the post-convention Executive Board meeting, plans for 1959-1960 were discussed by Mrs. Hatfield, and she gave her theme, "Cherish Our Heritage in Health."

Special Events

An overflow crowd attended the Memorial Services at the Alamo on Sunday, April 19. Special music was provided by Our Lady of the Lake College Chorus. Dr. Valin R. Woodward, Austin, gave the memorial address for the deceased physicians and Mrs. L. Bonham Jones, San Antonio, for the Woman's Auxiliary.

So that the members of the Auxiliary could meet Dr. and Mrs. Howard O. Smith, Marlin, and Dr. and Mrs. John D. Gleckler, a tea at the Argyle gave the convention a change of pace. Welcoming members were Dr. and Mrs. Haskell D. Hatfield, El Paso, and Dr. and Mrs. Franklin W. Yeager, Corpus Christi.

The River Parade, a Night in Old San Antonio, alumni and fraternity parties, were all a part of the social life, but the top event was the President's Party, a dinner dance, Tuesday night. Eduardo Martinez' Mexican Revue carried out the Fiesta theme, and the convention came to a close.

—MRS. HAL V. NORGAARD, Denton.

State Auxiliary Led By Mrs. H. D. Hatfield

Safety, helping others, young people, writing, research—these are a few of the special interests of Mrs. Haskell D. Hatfield, new President of the Woman's Auxiliary to the Texas Medical Association.

A native of Monroe, La., who moved to Shreveport when she was 2, Frances Lee Harris was graduated from Centenary College of Louisiana with a bachelor of arts degree in literature and psychology. After teaching at the Ysleta High School and the Radford School for Girls in El Paso, she was married to Dr. Haskell D. Hatfield of El Paso in 1934. Although the Hatfield family, including two sons, moved hither and yon during the years of World War II to keep up with the doctor's assignments while he

MRS. HASKELL D. HATFIELD

was in the military service, El Paso has remained home, and a new house completed only last year at 1628 Golden Hill is now headquarters. Dr. Hatfield's office for the practice of otolaryngology is a stone's throw away. Son Harris and his wife now live in El Paso and bring three grandchildren to play with "Granny." Son Dolph and his wife are in Austin, where he is a graduate student and researcher at the University of Texas, looking forward to medical school. Keeping pace with her sons while they were in college, Mrs. Hatfield received her master of arts degree in 1957 from Texas Western College.

Safety has been a prime concern of Mrs. Hatfield. She served as safety chairman for the El Paso Woman's Club and the Woman's Auxiliary to the El Paso County Medical Society, which she helped to win Carol Lane certificate awards; on the El Paso Safety Council, in which she was the only woman from 1954 to 1958 by appointment of the mayor; and in the Woman's Division of the El Paso Chamber of Commerce, for which activity she was presented a personal Carol Lane award in 1958.

Service to others is inherent in Mrs. Hatfield's philosophy. It may be through a personal visit to help an indigent cancer patient die in cleanliness and decency or

through helping to organize an auxiliary to the local city-county hospital, which has just been done with a charter membership of more than 250. It may be by serving as a director of such community agencies as the El Paso Guidance Center, the El Paso Unit of the American Cancer Society, and the United Council of Church Women; being a representative to the Council of Social Agencies; or as an active participant at St. Clement's Episcopal Church. It may be as service chairman and chaplain of her PEO chapter. But help others she does.

An enthusiasm and zest for life makes Mrs. Hatfield enjoy young people. As a director of the El Paso High School Parent-Teacher Association for 5 years, she worked closely with the students, organizing the Student Safety Council and assisting with a convention of the Southern Association of Student Councils in 1954. At St. Clement's she was director for 3 years of the vacation Bible school, and she conducted a curriculum survey of all Protestant church school literature in 1950, writing experimental courses of study for 3 years.

It was through her writing that Mrs. Hatfield first became known to many doctors' wives throughout Texas. Her play, "Rehearsal for Duty," was used first in El Paso in 1949 and later at a state School of Instruction. She was named editor of the *News Letter* of the Woman's Auxiliary to the Texas Medical Association after its initial issue. She was editor of her high school and college newspapers and on the staff of the college annual. She wrote a column, "Keeping Posted," for the Augusta, Ga., *Chronicle* while her husband was stationed there in 1944-1945, and has contributed book reviews under the title "The Bookshelf" for the El Paso *Herald Post* since 1948.

Research in early Americana, especially early Texas history, is a pet hobby of Mrs. Hatfield, indulged in when other activities permit.

A member of Alpha Xi Delta social sorority and Pi Gamma Mu honorary social science fraternity, Mrs. Hatfield is a member of El Paso Panhellenic and was vice-president of Texas Panhellenic in 1957-1958.

Has she had time for the medical auxiliary? Mrs. Hatfield has served on the community service, samples, and speaker's bureau committees; has been chairman of the ways and means, public relations, safety, and (twice) program committees; has been vice-president three times and president once of the El Paso auxiliary. As editor of the *News Letter* of the State Auxiliary 1952 to 1955, she became familiar with Auxiliary projects and personnel throughout the state and on the national level, where she was an unofficial reporter and writer for Mrs. George Turner of El Paso during her term of office as President of the Woman's Auxiliary to the American Medical Association in 1954-1955. The past year she has served an apprenticeship for her present job in the position of President-Elect of the State Auxiliary.

Mrs. Hatfield has chosen "Cherish Our Heritage in Health" as the theme for her year as President. She undertakes this task with extensive experience, innate ability, an affinity for work, and a fresh approach which should be rewarding for the entire organization.

★ American Medical Association

AMA Program Has Variety

Hypnosis, staphylococcal infections, blood cell disorders, space medicine, European spas, and aging are among subjects to be considered at the 108th annual meeting of the American Medical Association, to be held June 8-12 in Atlantic City.

Some 15,000 physicians are expected to attend this largest medical conference in the world, at which about 450 physicians will present scientific papers or participate in panel discussions and symposiums. In addition, there will be 387 scientific exhibits shown by doctors and 285 industrial exhibits prepared by pharmaceutical houses, medical equipment firms, and other business organizations.

Seven of the 21 sections of the AMA Scientific Assembly will mark their 100th anniversaries during the meeting. These are the sections on surgery, internal medicine, obstetrics and gynecology, experimental medicine and therapeutics, pathology and physiology, nervous and mental diseases, and preventive medicine.

Other features of the scientific program will include color television and motion pictures. Two films of special interest to be premiered deal with staphylococcal infections in hospitals and radiation protection in diagnostic radiologic examinations.

The House of Delegates with its 210 members (eight of them from the Texas Medical Association) will meet throughout the week. It will select a physician to receive its Distinguished Service Award and announce the winner of the Goldberger Award for outstanding contributions in the field of nutrition.

Dr. Louis M. Orr of Orlando, Fla., will be inaugurated as AMA president and honored afterwards at a reception and ball. A president-elect will also be named.

High school students who have won special AMA awards in the National Science Fair will show their prize-winning work, and sidelights of the convention will include a special art exhibit by the American Physicians' Art Association and the 43rd annual American Medical Golfing Association tournament.

Immediately prior to the opening of the convention, on Saturday, June 6, the seventh annual National Medical Civil Defense Conference will be held. Presented entirely by the Army Medical Service composed of the Army Medical Corps and the Army Medical Service Corps, the program will highlight medical problems involved in nuclear warfare. Physicians attending the session, which is sponsored by the AMA and its Council on National Defense, will get a one day version of the Army's one week education and training program dealing with mass casualty concepts and treatment techniques. (One of these courses is given regularly at Brooke Army Medical Center in San Antonio, the other at Walter Reed Army Medical Center in Washington, D. C.).

A one day special session on new concepts in aging will be held during the annual convention on Wednesday, June 10, under the auspices of the AMA Committee on Aging. Nationally recognized authorities in the field will speak, and physicians planning to attend the session are invited to send questions or points they would like discussed to the Committee, 535 North Dearborn, Chicago 10, no later than May 27.

The Woman's Auxiliary to the American Medical Association will hold its series of meetings in conjunction with the AMA convention. Mrs. Frank Gastineau, Indianapolis, will be installed as president, succeeding Mrs. E. Arthur Underwood of Vancouver, Wash.

Among the chief speakers before the women's group will be Lt. Col. Ingalls H. Simmons, director of the department of preventive medicine, Army Medical Service School, Fort Sam Houston, who will discuss survival medicine in national defense.

Texas (And Alaska) to Play Big Role at AMA Session

Texas physicians who attend the annual convention of the American Medical Association in Atlantic City June 8-12 will find themselves important participants in this major national medical meet.

Dr. Milford O. Rouse, chairman of the eight man delegation, will be nominated by his fellow delegates for the office of AMA vice-speaker, should a vacancy occur in that position during the Atlantic City session. Retiring president of the Southern Medical Association and a past president of the Texas Medical Association, Dr. Rouse is now a member of the Committee to Study AMA Objectives and Basic Program, as well as of the Committee on Insurance and Prepayment Plans.

Texas AMA delegates will be called upon to report the feeling of the Texas Medical Association's House of Delegates on the matters of panel medicine and free choice of physician, the first of which was vetoed and the second supported by that House during the April 18-21 annual session in San Antonio.

The Atlantic City session will mark the addition of an eighth delegate from Texas, Dr. J. C. Terrell of Stephenville. The other seven Texans, all of whom plan to attend, include Dr. J. B. Copeland, San Antonio; Dr. John K. Glen, Houston; Dr. G. W. Cleveland, Austin; Dr. Troy A. Shafer, Harlingen; Dr. T. C. Terrell, Fort Worth; and Dr. James H. Wooten, Columbus.

Texas physicians serving on reference committees during the AMA meeting will include Dr. Copeland, Board of Trustees; Dr. T. C. Terrell, executive session; Dr. Shafer, medical military affairs; and Dr. Wooten, sections and section work. Among Texas delegates from the sections and government services will be Dr. Charles T. Stone, Sr., Galveston, internal medicine. Dr. B. E. Pickett, Sr., Carrizo Springs, is among the chairmen of councils, ex officio members.

Pleasure, however, will also play an important role in convention activities of Texas physicians. The Texas delegation, together with Dr. Milo Fritz, the sole Alaskan delegate, will be host at a hospitality suite in the Traynor Hotel throughout the session.

"If you can't outbrag 'em, join 'em," is the theory of the Texans in inviting Alaska to co-sponsor the suite, where totem poles will mix with Lone Star flags and the strains of "Down On the Old Yukon" mingle with those of "Yellow Rose of Texas."

Philip R. Overton, general counsel of the Texas Medical Association; C. Lincoln Williston, executive secretary; and Donald Anderson, assistant executive secretary, will represent the Austin staff at the convention.

Representing the Woman's Auxiliary to the Texas Medical Association will be Mrs. Haskell D. Hatfield, El Paso, president, and Mrs. Ramsay H. Moore, Dallas, president-elect.

Lester Takes Washington Post

Dr. Roy T. Lester, medical director of Blue Cross-Blue Shield of Texas in Dallas for the past 5 years, has gone to Washington as manager of the American Medical Association's Washington office.

Edwin Patterson, whom Dr. Lester succeeds, has returned to his former employment as counsel of the Veterans Affairs Committee of the House of Representatives.

A specialist in thoracic surgery, Dr. Lester was in private practice in Abilene from 1950 until he moved to Dallas with Blue Cross-Blue Shield. He was clinical instructor in surgery at Southwestern Medical School of the University of Texas. Dr. Lester was a member of the Texas Medical Association's Committee on Voluntary Health Insurance and Health Care Costs at the time he accepted the Washington appointment.

New Editor for Today's Health

Dr. F. J. L. Blasingame, executive vice-president of the American Medical Association, has named Kenneth N. Anderson editor of *Today's Health*. Mr. Anderson, formerly associate editor of *Popular Mechanics*, special features assistant editor of *Better Homes and Gardens*, and bureau manager for International News Services in Omaha, replaces James M. Liston, who resigned to accept a position with *American Home* magazine.

★ District Societies

Second District Meets at Colorado City

The Second District Medical Society and its Auxiliary held meetings March 15 in Colorado City. Presiding was Dr. O. E. Rhode of that city, district president.

Guest speakers included Dr. E. Stanley Crawford, assistant professor of surgery, Baylor University College of Medicine, Houston, who discussed "Surgical Treatment of Stroke," and Dr. James K. Alexander, assistant professor of medicine at the same school, who spoke on "The Management of Chronic Pulmonary Disease." Dinner speaker was C. Lincoln Williston of Austin, executive secretary, Texas Medical Association, whose topic was "Public Relations and Socio-Economic Considerations in Medical Practice Today."

Other new officers include vice-president, Dr. Robert L. Price, Sweetwater, and secretary-treasurer, Dr. John H. Chinn, Jr., Colorado City.

Featured on the Auxiliary program was Mrs. M. J. Loring of Midland, council woman for District 2.

Lubbock Takes Third District Honors

Dr. Grady M. Wallace, Lubbock, has been elected 1959-1960 president of the Third District Medical Society, and that city has been selected as the 1960 meeting site of the group.

Other new officers include Dr. James L. Johnson, Amarillo, president-elect; Dr. George H. Benzon, Plainview, first vice-president; Dr. Alvin Bronwell, Lubbock, second vice-president; and Dr. Fred Johnson, Amarillo, secretary-treasurer. Dr. R. A. Neblett, Canyon, was nominated as Councilor; and Dr. William H. Gordon, Lubbock, Vice-Councilor.

★ County Societies

County Society News Briefs

"Hyperparathyroidism" was the topic of the scientific program when the *Dallas County Medical Society* held its February meeting. Speakers included Drs. Donald Seldin, Joseph D. Mitchell Jr., and Dan Gill. Dr. C. D. Bussey, president of the Dallas County Medical Plan, conducted a brief business meeting and election for that organization. Final business was the adoption of a report and recommendations from the society's public health committee, which recommended that fluorine in the Dallas water supply should be adjusted so as to provide the approximate equivalent of 1 part of flourine per 1,000,000 of water.

The *Wichita County Medical Society* honored K. A. Long, recently retired detail man of the Upjohn Company, for 27 years of service. Making the presentation at the society's March 10 meeting was Dr. E. A. Cox of Wichita Falls, master of ceremonies, and Dr. Gordon G. Clark, Iowa Park, society president. W. F. Allen of Kalamazoo, Mich., Upjohn vice-president, was present, and the meeting was featured in the March 25 issue of *Scope*.

The *Potter-Randall Counties Medical Society* dated Dr. Maxwell M. Wintrobe, professor of medicine at the University of Utah School of Medicine, for its April 13 meeting in Amarillo. His topic was to be "The Approach to Anemia and the Pros and Cons of Blood Transfusions."

At the group's March meeting, an automotive crash injury research program to be conducted in the area by the Texas Highway Patrol, the State Department of Health, and Cornell University was announced. A panel discussion of educational facilities in Amarillo for mentally retarded, blind, and other handicapped children was presented by physicians, the director of the city child guidance center, a representative of the public schools, and others.

The *Dallam-Hartley-Sherman-Moore Counties Medical Society* met at the North Plains Country Club in Dumas March 5 for a dinner session, at which Dr. Louis R. Devanney of Amarillo was guest speaker. His paper was on "Urological Problems in General Practice."

State Representative Bill Heatley discussed current medical legislation in the Texas Legislature when the *Hardeman-Cottle-Foard-Motley Counties Medical Society* met in Paducah February 26.

"Treatment with High Voltage Therapy" was the topic of Dr. Jarrell Miller, clinical associate professor of radiology at the University of Texas Southwestern Medical School, Dallas, when he appeared before the *Gray-Hansford-Hemphill-Lipscomb-Roberts-Ochiltree-Hutchinson-Carson Counties Medical Society* at the Pampa Country Club recently.

The *Tom Green-Coke-Crockett-Concho-Irion-Sterling-Sutton-Schleicher Counties Medical Society* held a business meeting on March 2, during which the group discussed sending of telegrams in behalf of the Keogh-Simpson bill to Texas Senators and Congressmen and passed a resolution presented by Dr. Eugene C. Winkelmann in regard to licensing of psychologists. Drs. Robert Franken, Cecil French, and K. S. Round were named a committee to consider matters relating to an emergency hospital for use during disaster. Dr. Lloyd R. Hershberger, San Angelo, presented a film, "Atoms for Peace."

Dr. Donald W. Seldin of the University of Texas Southwestern Medical School, Dallas, discussed "Therapeutic and Toxic Potentialities of Adrenal Steroids" when he appeared as guest speaker March 16 before the *Cameron-Willacy Counties Medical Society*.

Six members were appointed to a committee on industrial and bracero insurance. They were Dr. H. L. Scales, Jr., San Benito, chairman; and Dr. Heinrich Lamm, Harlingen; Dr. George Gallaher, Harlingen; Dr. Karl A. Roth, Brownsville; Dr. Ervin Baden, Raymondville; and Dr. Fred Destefano, Brownsville.

Appointed to a civil defense committee were Dr. Evan B. Hume, Brownsville, chairman; Dr. William Ross, San Benito; Dr. Cornelius Olcott, Jr., Harlingen; and Dr. Verne F. Goerger, Raymondville.

County Societies Elect Officers

Newly elected officers of county medical societies in Texas, not previously announced, include the following:

Anderson-Houston-Leon.—President, Dr. O. B. Harrington, Palestine; vice-president, Dr. E. S. Darsey, Crockett; secretary-treasurer, Dr. Thomas E. Walkup, Palestine; delegate, Dr. John L. Dean, Crockett; alternate delegate, Dr. Robert G. Cox, Palestine; board of censors, Dr. Fred E. Felder, Palestine; Dr. C. M. Griswold, Crockett; and Dr. A. B. Brown, Jr., Crockett.

Atascosa.—President, Dr. Walter H. Joyce, Lytle; secretary-treasurer, Dr. John D. Austin, Pleasanton; delegate, Dr. Walter H. Joyce, Lytle; alternate, Dr. John M. Faggard, Poteet.

Brazos-Robertson.—President, Dr. T. O. Walton, College Station; president-elect, Dr. L. O. Wilkerson, Bryan; vice-president, Dr. A. G. McGill, Bryan; secretary-treasurer, Dr. O. C. Cooper, Bryan; delegate, Dr. Richard B. Grant, Jr., Bryan; alternates, Dr. Joseph M. Cox and Dr. S. C. Richardson, Bryan; board of censors, Dr. R. H. Harrison, Jr., Bryan; Dr. Joseph C. Gallagher, Hearne; Dr. S. C. Richardson and Dr. J. E. Marsh, Jr., Bryan.

Coleman.—President, Dr. Manly E. Weaver; vice-president; Dr. R. R. Lovelady; secretary-treasurer, Dr. Morris D. Mann; delegate, Dr. Lovelady; alternate, Dr. F. M. Burke; board of censors, Drs. Weaver, Burke, and J. C. Young, all of Coleman.

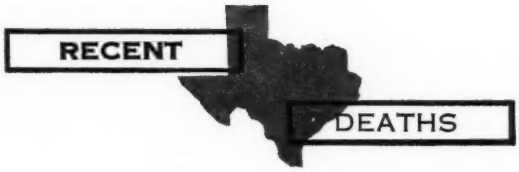
Cooke.—President, Dr. Charles K. Mills, Gainesville; vice-president, Dr. Thomas S. Myrick, Muenster; secretary-treasurer, Dr. Van G. Kaden, Gainesville; delegate, Dr. James W. Atchison, Gainesville; alternate, Dr. Charles K. Mills, Gainesville; board of censors, Dr. T. S. Myrick.

DeWitt.—President, Dr. Marvin H. Gohlke, Yorktown; vice-president, Dr. John C. Davis, Yoakum; secretary-treasurer, Dr. Oscar E. Hall, Jr., Cuero; delegate, Dr. Frank A. Prather, Cuero; alternate, Dr. L. B. S. Richter, Yoakum; board of censors, Dr. Leon Nowierski, Yorktown, and Dr. John E. Trott, Yoakum.

Gonzales.—President, Dr. N. A. Elder, Nixon; vice-president, Dr. W. A. Sievers, Gonzales; secretary-treasurer, Dr. James C. Price, Gonzales; delegate, Dr. Odon von Werssowetz, Gonzales; alternate, Dr. Louis J. Stahl, Gonzales; board of censors, Dr. Stahl, Dr. Stewart Ponder, Waelder, and Dr. Sam A. Nixon, Jr., Nixon.

Harrison.—President, Dr. George E. Bennett, Marshall; president-elect, Dr. George A. Farquhar, Marshall; vice-president, Dr. Malcolm McNatt, Marshall; secretary-treasurer, Dr. Edgar H. Allen, Jr., Marshall; delegate, Dr. Richard G. Granbery, Marshall; alternate, Dr. Charles A. Wyatt, Marshall; board of censors, Dr. Granbery.

Upshur.—President, Dr. J. L. Fenlaw; vice-president, Dr. H. M. Ragland; secretary-treasurer, Dr. M. S. Ragland; delegate, Dr. J. G. Daniels, all of Gilmer.



DR. JOHN GILLETT BURNS

Dr. John Gillett Burns, chief surgeon of Burns Hospital in Cuero, died of cancer on March 9, 1959.

He was born September 25, 1894, in Cuero and was the son of Dr. John W. Burns and Nettie (Gillett) Burns. After attending Cuero schools, he received his bachelor's degree from Southwestern University in Georgetown and his medical degree from Johns Hopkins University, Baltimore, in 1920. Interning at St. Vincent's Hospital in Cleveland, he then became postgraduate resident in surgery at the Mayo Clinic in Rochester, Minn. During World War I, he served with the Reserve Medical Corps at Johns Hopkins.

DR. JOHN GILLETT BURNS

Dr. Burns entered private practice in Cuero in 1925, continuing there until his death. His father, who was president of the Texas Medical Association in 1930, founded the Burns Hospital, which is now operated by the nuns of the Incarnate Word and Blessed Sacrament Order.

He was a member of the American Medical Association, a fellow of the American College of Surgeons, active fellow of the Southwestern Surgical Congress, and member of the Texas Surgical Society and of the Southern Medical Association. In 1933, he was secretary of the Texas Medical Association's Section on Surgery. He was president of the DeWitt County Medical Society in 1952. Dr. Burns was a member of the First Methodist Church of Cuero. He also belonged to the Knights of Pythias, Phi Delta Theta, and the American Legion.

He is survived by his wife, the former Miss Mattie Kent, whom he married in San Antonio in 1933, and by his mother, Mrs. John W. Burns, Cuero.

DR. M. C. KIMBALL

Dr. Melvin Clinton Kimball of Borger died in a local hospital March 24, 1959, after a long illness.

Dr. Kimball was born on March 16, 1908, in St. Louis. He was the son of Melvin Clinton Kimball, Sr., and Helena (Bantz) Kimball. He was graduated from Central High School in Tulsa, Okla., attended the University of Illinois, and received his medical degree from the University of Oklahoma in 1931. He interned at Willard Parker Hospital, Belevue Hospital, and St. John's Hospital, all in New York, later doing postgraduate study in obstetrics and pediatrics at the University of Oklahoma.

The physician practiced medicine for a short time in Oklahoma City, and then for 6 years in the Burbank oil field, with offices in Webb City, Okla. In 1942, he joined the medical department of the Phillips Petroleum Company, transferring to Borger as head physician for the company's Plains plant shortly thereafter. In recent years, he had maintained a private practice in the Tri-City area. His specialty was surgery.

DR. M. C. KIMBALL

Dr. Kimball was a member of the American Medical Association, the American Academy of General Practice, the Texas Academy of General Practice, and the Texas Medical Association. He was 1946 president of the Gray-Hansford-Hemphill-Lipscomb-Roberts-Ochiltree-Hutchinson-Carson Counties Medical Society and vice-president in 1954.

Chief of staff of North Plains Hospital in Borger, for one term, Dr. Kimball was later chairman of its tissue committee. He was a president of his county tuberculosis association, vice-president of the Borger Chamber of Commerce, director of Borger Hotel, county chairman of the Republican Party in 1952-1954, member of the Rotarians, his Presbyterian Church choir, and a music club string ensemble. His hobbies, in addition to music, were golf and bridge.

Dr. Kimball is survived by his wife, the former Miss Marion English Morris of New York, whom he married in Greenwich, Conn., in 1932; a daughter, Mrs. Charles D. Hamilton, Borger; two sons, William Morris and Robert Melvin Kimball, both of Borger; and two sisters, Mrs. J. N. Troxell, Houston, and Mrs. Fred H. Murdock, Tulsa.

DR. WALTER H. MOURSUND

Dr. Walter Henrik Moursund, Sr., 74, who served one of the longest tenures in the United States as dean of a medical school—Baylor—died in a Houston hospital on April 2, 1959, after a 3 month illness.

Dr. Moursund was the son of Norwegian immigrants, District Judge Albert Waddell and Henrikke M. Moursund of Fredericksburg. He was born in that city on August 13, 1884, one of eight children. After being graduated from Fredericksburg High School, he received his medical degree at the University of Texas Medical Branch, Galveston, in 1906.

He married Miss Freda Adelaide Plate of Seguin on June 24, 1907, and for the next several years was a general practitioner in Fredericksburg, Seguin, Marion, Lavernia, and Sulphur Springs.

Dr. Moursund's career with Baylor University College of Medicine began in 1911 in Dallas, when he joined its staff as an assistant in pathology and bacteriology. Through the years, he became professor of physiology, professor of pathology, professor of clinical pathology, professor of bacteri-

DR. WALTER H. MOURSUND

ology and hygiene, secretary and registrar, acting dean, and, in 1923, dean. Dr. Moursund served Baylor as its dean of medicine from 1923 until 1953, moving to Houston with the school in 1943. Upon his retirement in 1953, he was named dean emeritus and director of endowment. "A History of Baylor University College of Medicine, 1900 to 1953" was published in 1956 over his byline.

Dr. Moursund was a member of the American Medical Association, the Southern Medical Association, and the Harris County Medical Society. The Texas Medical Association elected him to emeritus membership in 1950. The honors which came to him were many. Baylor University awarded him an honorary doctor of laws degree in 1946, and, in 1951, the Walter H. and Freda Moursund endowment at the Baylor University College of Medicine was begun by a $1,000 contribution by a former student.

The physician was a member of the First Presbyterian Church of Houston. He belonged to the Masons, the Woodmen of the World, the Modern Woodmen of America, and the Doctors' Club of Houston. During World War I he served with the Army as a captain and then major. He also was a charter member of the board of the Baylor Medical Foundation.

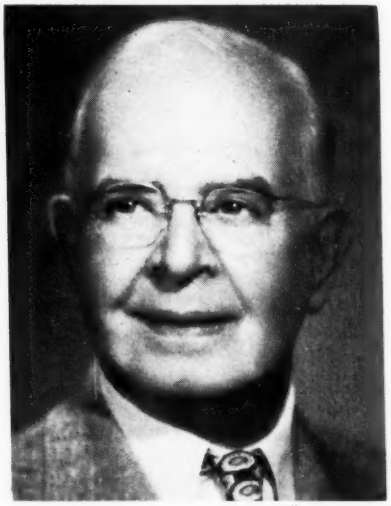
Dr. Moursund, coming from a family of lawyers and civil engineers, credited his interest in the study of medicine to recollections of a kindly family doctor who had helped through childhood illnesses. In newspaper interviews in the latter years of his life, he regretted that specialization was eclipsing the old-time family doctor and counselor.

Surviving Dr. Moursund, in addition to his wife, are two sons, Col. Walter H. Moursund, Jr., who is attached to the office of the Surgeon General, United States Army Medical Corps, at Washington, D. C., and Waddell Moursund, Mineral Wells; one daughter, Mrs. G. A. Essig of Dayton, Ohio; one sister, Mrs. E. L. Malsby of Mineral Wells; three brothers, Anton N. Moursund, San Antonio; L. Erik Moursund, Austin; and Rolf C. Moursund, Fredericksburg; and five grandchildren.

DR. DONALD T. ATKINSON

Dr. Donald Taylor Atkinson of San Antonio, eye specialist and author, died in that city on March 20, 1959, of coronary occlusion.

A native of Canada, Dr. Atkinson was born on May 31, 1874, in Little Shemogue, New Brunswick. He was the son of Joseph Silliker and Elizabeth A. (Grant) Atkinson. He came to the United States in 1891 and eventually obtained his medical degree at the then Hospital College of Medicine in Louisville, Ky., in 1902, later working and studying in Vienna and London. He received a doctor of



DR. DONALD T. ATKINSON

science degree from Center College in Danville, Ky., in 1944 and an honorary doctor of laws degree from Huron College, South Dakota, in 1945.

Dr. Atkinson practiced medicine in San Antonio for 50 years. It was estimated that he performed more than 3,500 operations on blind persons at Santa Rosa Hospital; he was also a member of the Nix Hospital staff. He originated a number of instruments and operative methods in eye surgery which have been adopted by other surgeons.

The veteran physician, who became a United States citizen in 1916, achieved both medical and literary distinction during his life. He was awarded a fellowship in the National Surgical Society of Italy and a bronze medal from the University of Florence for his research in glaucoma. He was a life member of the American Medical Association of Vienna, a fellow of the International College of Surgeons in Geneva, and a fellow of the Royal Academy of Medicine in Dublin.

Dr. Atkinson was editor of ophthalmology in the *Texas Medical News,* published for about 20 years, from 1913 to 1916. He was an associate editor of the *Chicago Eye, Ear, Nose, and Throat Journal* for many years, and he personally illustrated in color his text book on the eye's interior. Among Dr. Atkinson's books was "Magic, Myth and Medicine," published in 1955. His most recent book, an autobiography entitled "Texas Surgeon," won him an award as one of Texas' outstanding authors of 1958 at the tenth annual Writers' Round-up sponsored by Theta Sigma Phi, the national professional journalism fraternity for women, in Austin.

Dr. Atkinson was a member of the American Medical Association, Texas Medical Association, Bexar County Medical Society, American College of Surgeons, American Academy of Ophthalmology and Otolaryngology, Southern Medical Association, National Tuberculosis Association, American Genetic Association, American Social Hygiene Association, National Society of Arts and Letters, National Association of Authors and Journalists, and the San Antonio River Art Group.

He is survived by his wife, the former Miss Wanda Wiley, whom he married in 1937; one brother, John S. Atkinson, Akron, Ohio; and a niece, Mrs. Baun Jordan, Watsonville, Calif.

DR. GEORGE THOMAS VINYARD

Dr. George Thomas Vinyard of Amarillo died on February 11, 1959, of uremic coma.

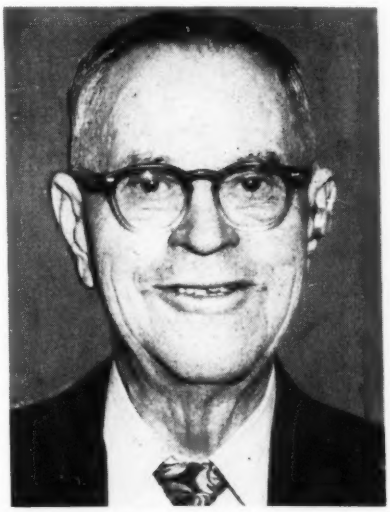
He was born January 30, 1870, at Lawrenceville in Gwinnett County, Ga., son of George Stephens and Millie (Drummond) Vinyard. After attending rural schools and Mercer University in Macon, Ga., he received his medical degree from Barnes Medical College in St. Louis in 1894.

Dr. Vinyard took postgraduate study at Chicago Polyclinic, New York Polyclinic Medical School, and New Orleans. In 1928, accompanied by his wife, he toured Europe with the Foreign Assembly of the Inter-State Postgraduate Association of North America. He practiced medicine in Crafton, Texas, from 1894 to 1902, and then in Amarillo from 1902 until his retirement in June, 1955.

For many years, Dr. Vinyard practiced in partnership with his two brothers, Dr. Roy L. Vineyard and Dr. Sam Polk Vineyard; the partnership was dissolved just prior to the death of Dr. Sam Vineyard in 1934, the two surviving brothers maintaining separate offices during the remaining years.

In 1905, a group of 13 doctors met in the Vinyard office to organize the Potter County Medical Society. Dr. George Thomas Vinyard was a charter member, first secretary, and later president. He was a member of the Texas Medical Association, a president of District 3, Councilor of District 3 for 12 years, and was elected to honorary membership in 1950. He was a member of the Southern Medical Association and the American Medical Association and a fellow of the American College of Surgeons. Dr. Vinyard was city health officer of Amarillo in 1914 and again in 1918 and was the first director of the Red Cross chapter in Potter County. He headed the first major tuberculosis Christmas seal sale in the Amarillo area. He belonged to the Baptist Church.

Dr. Vinyard was known as a crusader against socialized medicine, and, in 1934, was the first physician in Potter County to propose opposition to this trend. He presented a resolution supporting a stand on this subject taken by the Texas Medical Association, which his county society adopted unanimously.



DR. GEORGE THOMAS VINYARD

Preceding Dr. Vinyard in death was his wife, the former Miss Clementine Armstrong, whom he married in 1894 in Sunset, Wise County. She died February 18, 1943.

The physician is survived by a son, Truman Vineyard, Amarillo; a grandson, Truman Tom Vineyard, Amarillo; three bothers, Dr. Roy L. Vineyard and Jim Vineyard, Amarillo; and J. O. Vineyard, Midland; two sisters, Mrs. Allen Baker, Elk City, Okla.; and Mrs. Claude J. Wells, Memphis, Tex.; and three great-granddaughters, all of Amarillo.

DR. JAMES J. RICHARDSON

Dr. James Joseph Richardson, Fort Worth eye, ear, nose, and throat specialist, died in that city on March 7, 1959.

He was born November 8, 1880, at Horse Cave, Ky., the son of A. B. and Mary Harriet (Marshall) Richardson. After receiving his preliminary education in Greensburg, Ky., he attended the then Fort Worth University, receiving his medical degree in 1912 from St. Louis University School of Medicine in Missouri.

Dr. Richardson interned at St. John's Hospital in St. Louis, then served as a first lieutenant with the medical branch of the National Guard in 1914. He did postgraduate work in 1915 at the Chicago Eye, Ear, Nose, and Throat College, in 1918 at Tulane in the same field, and in 1922 at Bellevue Hospital, New York, in that area.

The physician practiced in Fort Worth from 1914 on. He was a member of the American Medical Association, was certified by the American Board of Otolaryngology and

belonged to the Texas Medical Association, serving as secretary of the Section on Eye, Ear, Nose and Throat in 1918 and 1936. He was a fellow of the American College of Surgeons and a member of the Tarrant County Medical Society, the American Academy of Ophthalmology and Otolaryngology, the Texas Society of Ophthalmology and Otolaryngology, and the Fort Worth Eye, Ear, Nose, and Throat Society. He was a member of the Methodist Church, belonged to the Masons and the Fort Worth Club.

Dr. Richardson is survived by his wife, the former Miss

DR. JAMES J. RICHARDSON

Margaret Louise Tidwell of Nashville, Tenn., whom he married in Fort Worth in 1914; four sons, Dr. James J. Richardson, Jr., Dr. Robert C. Richardson, Richard F. Richardson, and John M. Richardson, all of Fort Worth; two daughters, Mrs. Jack Billingsley and Miss Peggy L. Richardson, Fort Worth; one brother, Mitt Richardson, Horse Cave, Ky.; three sisters, Mrs. T. F. Slaughter and Mrs. Bosley Perkins, Horse Cave, and Mrs. F. H. Vaughn, Campbellsville, Ky.

DR. JAMES G. CURTIN

Dr. James Golden Curtin, Houston general practitioner, died in that city on March 16, 1959.

Born in Woodville, Wis., on July 8, 1896, Dr. Curtin was the son of Daniel R. and Mary (Golden) Curtin. He received his preliminary schooling in Milwaukee, attended a state teachers' college in Milwaukee, and then received his bachelor of science degree from the University of Wisconsin in Madison in 1923. He was graduated from the medical school of the University of Pennsylvania, Philadelphia, in 1925, then interned at Philadelphia Polyclinic and at Mt. Sinai Hospital in Milwaukee.

During World War I, Dr. Curtin was a second lieutenant stationed at Ellington Field, Texas, and in France.

Dr. Curtin began his medical practice in Milwaukee in 1926, remaining there until 1949. At that time, he moved to Houston. He had been on the staff of North Houston Hospital, and he was a member of the American Medical Association, the Texas Medical Association, the Wisconsin Medical Association, Harris County Medical Society, American Academy of General Practice, and Texas Academy of General Practice. He was a Catholic.

Surviving are his wife, the former Miss Sadye Bornstein of Milwaukee, whom Dr. Curtin married in 1935 in Woodstock, Ill.; a son, James G. Curtin, Jr., Houston; two sisters, Mrs. Hazel Erickson, La Crosse, Wis., and Mrs. Nell Van Able, Hollandtown, Wis.; three brothers, Dr. Joseph J. Curtin, Milwaukee, Dr. Donald Curtin, Kimberly, Wis., and Robert D. Curtin, Milwaukee.

DR. A. BELVIN PRITCHETT

Dr. Asa Belvin Pritchett of San Antonio died February 18, 1959, of a heart attack. He was born in San Marcos on February 4, 1892, and was the son of John Edward and Roberta (Belvin) Pritchett. After being graduated from San Marcos High School, he attended Southwestern University in Georgetown. He received his medical degree in 1917 from the University of Texas Medical Branch in Galveston.

Dr. Pritchett interned at St. Louis City Hospital and at Scott and White Clinic, Temple. He was a medical branch first lieutenant with an Army field hospital during World War I, and did postgraduate work at the University of Pennsylvania School of Medicine in 1921 and 1922. He specialized in eye, ear, nose, and throat treatment.

In 1945, Dr. Pritchett married the former Mrs. B. M. McNeley in Miami, Fla.

He was a member of the Bexar County Medical Society,

DR. A. BELVIN PRITCHETT

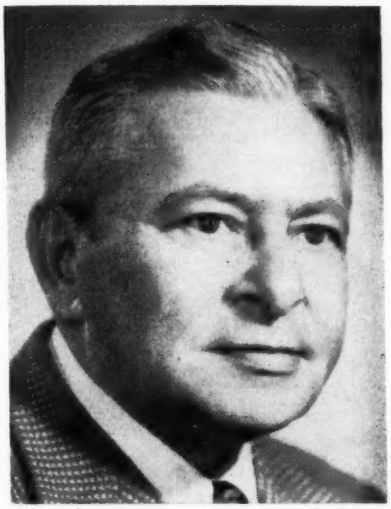
Texas Medical Association, Southern Medical Association, and American Medical Association. He was a president of the San Antonio Eye, Ear, Nose, and Throat Society, belonged to Phi Delta Theta and Phi Ro Sigma, was a member of the San Antonio Chamber of Commerce and the San Antonio Country Club, and belonged to the Laurel Heights Methodist Church. His hobbies were golf and hunting.

Dr. Pritchett is survived by his wife, who lives in San Antonio, and four sisters and two brothers of Austin and Bryan.

DR. JEROME NAST

Dr. Jerome Nast, 1953 Nueces County Medical Society nominee for "General Practitioner of the Year," died in Corpus Christi on March 20, 1959.

Dr. Nast was born on July 26, 1895, in Corry, Pa. Son of Daniel and Mathilda Nast, he attended Corry public schools, being graduated from Corry High School as salutatorian of his class. He received his medical degree from the University of Pennsylvania School of Medicine in 1919, interning at Passavant Hospital in Pittsburgh the following year. His next assignment was as pathologist at St. John's Hospital in the same city, and he did postgraduate study at Tulane University, New Orleans, in 1922.



DR. JEROME NAST

While still a medical student, Dr. Nast went on active duty with the student medical reserve corps for 2 years during World War I. In 1919, he married Miss Julia Cohn, a San Diego, Texas, girl who was attending an eastern school, and her Texas heritage brought them to South Texas in 1921.

When Dr. Nast began private practice in Corpus Christi, the town had a population of 14,000. While Spohn Hospital was in its infancy, he acted often as both pathologist and radiologist.

Dr. Nast served as secretary, treasurer, vice-president, and 1951 president of the Nueces County Medical Society. He was a member of the American Medical Association, the Texas Medical Association, the American Academy of General Practice, and the Texas Academy of General Practice. He held various positions with Corpus Christi hospitals, among them chief of staff of Spohn Hospital and vice-chief of Memorial Hospital. For more than 20 years, he was chief surgeon of the Corpus Christi area division of the Missouri Pacific Railroad. Dr. Nast was a member of Temple Beth El. His hobbies were fishing, hunting, and bridge.

Surviving the physician are his wife and one son, Dr. Maurice D. Nast of Corpus Christi; two grandchildren; a brother, Mervyn Nast of Corry, Pa.; and a sister, Mrs. Tesse Kambar, New York.

DR. RAY B. WRIGHT

Dr. Ray Barkley Wright, Laredo's oldest physician, died in that city at 84 years of age on March 10, 1959. Immediate cause of death was cerebral accident due to aortic aneurysm, aortitis.

Dr. Wright was born April 24, 1874, in Kaufman County, son of the Rev. Henry Wright and Alice (Barkley) Wright. Both his parents had come from Kentucky. His father, a Christian Church minister, arrived on horseback at the age of 19, and his mother was brought in a wagon when she was 5. Before her marriage, Mrs. Wright served as Texas's first woman postmaster at Birdwell, then county seat of Tarrant County. One of Dr. Wright's ancestors was a signer of the United States Declaration of Independence, while another was James Ray, a famous Kentucky Indian fighter.

The physician was graduated from Dallas High School in 1894 and from the then Physio-Medical College of Indiana in 1897. During his years of practice, he served in Dallas, Willis, Carrizo Springs, and in towns in Limestone and Eastland Counties before settling in Laredo for 29 years. Dr. Wright was in the United States Public Health Service for 23 years. After his retirement, he continued private practice.

He was county health officer in Dimmit County for 4 years, was an assistant city health officer in Dallas, belonged to the Webb-Zapata-Jim Hogg Counties Medical Society, and was elected to honorary membership by the Texas Medical Association in 1952.

During World War I, Dr. Wright was an officer with the armed forces; he was also an officer with the Texas State Guard.

DR. RAY B. WRIGHT

Like many of Texas' "horse-and-buggy" doctors, Dr. Wright took an important part in the progress of his community. When he came to Carrizo Springs, it was on a stagecoach drawn by small mules; eventually, he himself drove the last spike in the railroad track to that city, and he was one of a group of six who signed a $50,000 note to get the railroad into the town.

In a 1954 newspaper story, Dr. Wright is quoted as saying: "When I hear anyone complain that there are

no longer opportunities here, I'm reminded that there were some who deplored the arrival of homeseekers in the early days of Carrizo Springs . . . . They blamed the new settlers for having raised the cost of land from $1 to $10 and $15 an acre."

Through most of his years in Laredo, Dr. Wright operated a drugstore, the International Pharmacy.

Dr. Wright was a Woodmen of the World and a member of the First Christian Church of Laredo, and the Sociedad de Obreros in that city. The Masonic Lodge awarded him a 50 year button in 1958. Reared in cattle country, he enjoyed reading ranch stories as a hobby.

The physician was married twice. In 1900, he married the former Miss Jessie L. Neal of Dallas in a Rockwall ceremony; she died in 1937. Dr. Wright and Miss Brigida Escobedo were married in Laredo on September 7, 1957.

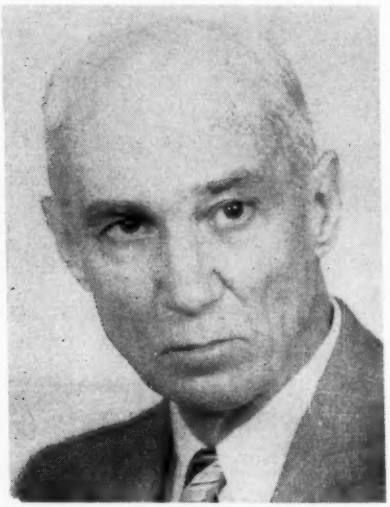
Surviving are Dr. Wright's wife; one son, Ray B. Wright, Jr., Laredo; one daughter, Mrs. George Schvab, Beeville; and two sisters, Mrs. Linnie Wright Barrett, Dallas, and Mrs. Beannie May Wright Phares, Austin.

DR. WINFIELD SCOTT PENCE

Dr. Winfield Scott Pence of San Saba, general practitioner who specialized in treating children and who delivered San Saba County's only set of triplets, died in that city on April 9, 1959.

In his memory, the community established the Dr. W. S. Pence Memorial Fund for crippled children of San Saba County.

Dr. Pence was born on May 13, 1890, in Brady. His parents were William Riley and Julia (Barney) Pence. After attending the University of Texas in Austin, he received his medical degree from the Medical Branch in Galveston in 1928. He interned at Robert B. Green Memorial Hospital in San Antonio the following year. In 1917-1918, Dr. Pence was a second lieutenant with the nation's aviation corps.



DR. WINFIELD SCOTT PENCE

He was president of the Brown-Comanche-Mills-San Saba Counties Medical Society in 1934 and 1936, also belonging to the Texas Medical Association and the American Medical Association. He was a member of the Methodist Church. His hobbies were fishing and hunting.

Dr. Pence was married to Miss Mary Harper of Mason in that city on August 23, 1909.

He is survived by his wife. His son, Winfield Scott Pence, Jr., served in World War II and died in San Saba November 2, 1957.

DR. LEOPOLDO LEMUS

Dr. Leopoldo Lemus of San Antonio died in that city on February 9, 1959.

He was born December 1, 1898, in Chihuahua City, Mexico, and was the son of Jose T. and Josefa (Ochoa) Lemus. He attended schools in Durango City, and received his medical degree from Escuela Medico Militar in Mexico City in 1923. He interned at the Military Hospital in Oaxaca and in the infirmary of the Military College in Mexico City. In 1925, he was professor of physiology at the Institute of Sciences in Oaxaca. His specialty was pediatrics.

DR. LEOPOLDO LEMUS

Dr. Lemus was discharged from the Mexican Army and was licensed by the Texas State Board of Medical Examiners in 1927. He practiced briefly in Del Rio and San Angelo, returning to Mexico City to enter private practice from 1930 to 1946. From 1947 until his death, Dr. Lemus had a private practice in San Antonio. Dr. Lemus had obtained his United States citizenship.

The physician was a member of the Bexar County Medical Society, Texas Medical Association, and American Medical Association. He also belonged to the Knights of Columbus. His hobby was playing the piano.

Dr. Lemus is survived by his widow, the former Miss Soleded Aramburu, whom he married in Mexico City in 1937; two sons, Fred Lemus, a statistical engineer at San Jose, Calif., and George Lemus, a professor at Loyola University of Los Angeles, Calif.; and one daughter, Mrs. Edmund Cantu of San Antonio.